

# Appendix 6

## Energy Services Company Market Assessment

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# **SECTION 6A**

ESCO In-Depth  
Interview Guide

# ESCO In-Depth Interview Guide

This interview supports NYSERDA’s energy services company (ESCO) market assessment. We are interviewing representatives of ESCOs that operate in the New York State non-residential energy efficiency market. The guide helps to ensure the interviews include questions concerning the most important issues being investigated as part of this assessment. Follow-up questions are a normal part of these types of interviews. Therefore, there will be questions that will be more fully explored with some individuals than with others.

- Topics covered: This market assessment will address the size of the NY State ESCO industry, ESCO operations, the ESCO competitive and, and drivers and barriers to ESCO project implementation.
- Traditional ESCO definition: Firms that provide a comprehensive set of turnkey services, including energy efficiency-related and other value-added services and for which performance contracting makes up a core part of its energy-efficiency services business.
- Energy savings performance contract (ESPC) Definition: A mechanism that allows building owners and managers to make energy efficiency upgrades in their facility and make regular payments to repay the cost of the project based on guaranteed levels of energy savings.
- Engineering/Design-build Firms: Firms that may act as general contractors or consultants. They provide recommendations to the building ownership and play a role as project manager subcontracting the implementation to end-use specific contractors. They can design turnkey projects for a variety of end-uses.

Firm	Quota
Traditional/Large ESCO	Up to 10
Small/Medium ESCO (Design-Build Firms)	Up to 15

## SCREENER

Hello, my name is [INTERVIEWER NAME] and I’m calling on behalf of NYSERDA (NY State Energy Research & Development Authority). May I speak with [CONTACT NAME]?

We are gathering information on the size and characteristics of the non-residential markets that ESCOs serve in NY State. For the purposes of this study, we are distinguishing between two different types of ESCOs. The first are the traditional ESCOs that provide comprehensive energy efficiency-related services and typically leverage longer-term energy savings performance contracts. The second type of firms are engineering or design-build firms that can design turnkey projects for a variety of end-uses. (IF NEEDED: Reference more detailed definitions above)

- S1. Would you say that one of these descriptions applies to your firm? Which one? [\[IF NO\]](#) Thank and terminate.
- S2. Has your firm been associated with a NYSERDA or a NY utility demand side management program, either now or in the past? This could be as a program implementer or a program trade ally. [\(Record if NYSERDA or utility, now or past, implementer or trade ally.\)](#)

Before we begin, I wanted to note that any information you provide during this interview will be aggregated with other responses. None of the information that I gather will be directly linked to a specific respondent.

Advise interviewee that the interviews will be audio taped and transcribed. Recordings will be used to help with note taking only.

**BACKGROUND INFORMATION**

- A1. To start, can you briefly describe the type of work your firm does and your role in your organization?
- a. And how many people does your firm employ?  
SECT. Does your firm serve the public sector, the private sector, or both? [\(Record if primarily one sector or the other.\)](#)

Sector	Y/N	Primary Focus
Public		
Private		

(INTERVIEWER NOTE: For the remainder of this interview, read in “public sector” or “private sector” based on response to SECT above. Also, where noted, read interview question twice—once for public sector and once for private—as needed based on response to SECT above.)

- A2. What are the key enduses that are typically included in your firm’s... *(Probe for lighting, HVAC, refrigeration, motors/drives, EMS, building envelope, IT, process)*
- a. [\[IF PUBLIC\]](#) public sector energy efficiency projects?
- b. [\[IF PRIVATE\]](#) private sector energy efficiency projects?
- c. How often do your projects include non-lighting measures? *(Record % of projects, by public/private)*

A3. I would like to get a sense of the size of the buildings your firm typically serves. Over the past 2 years, what percent of the non-residential buildings that your firm served were...?

Building Size (Square Feet)	Percent
Less than 50,000 Square Feet	
Between 50,000 and 100,000 Square Feet	
Over 100,000 Square Feet	

### ESCO OPERATIONS/BUSINESS MODELS

My next few questions are about your company's operations and the services it offers.

- B1. I am going to read a list of non-residential market segments.
- For each, please tell me approximately how many projects your company completes in a typical year in NY State. *(Read list of public and/or private sector segments, based on response to SECT; probe for "other" segments in each sector. If they can't provide the number, record if they operate in the segment. Compute and confirm total number of projects.)*
  - Would you say your firm specializes in any particular segment? Which one(s)?
  - Approximately, what is the average per project floor space for projects your firm completes in ...?
  - Can you estimate the typical first-year energy savings for projects that your firm completes in...? (If respondent can't provide per project kWh estimate, probe for % of energy bill.)

Segment	(a) # Projects	(b) Specializes	(c) Square Feet	(d) kWh Savings per Project
<i>Public</i>				
K-12 Schools				
Public Colleges and Universities				
Multi-family (public housing)				
Municipalities				
Other Public Buildings, specify:				
TOTAL PUBLIC				
<i>Private</i>				
Private Colleges and Universities				
Medical Campuses				
Commercial Office				
Retail				
Multi-family				
Hospitality				
Other Private Buildings, specify:				
TOTAL PRIVATE				

B3. Does your firm typically work with building owners or do you also work directly with tenants?

a. [IF TENANTS] How often do you work directly with tenants? (Probe: always, mostly, sometimes, rarely, never)

B4. How often do you use sub-contractors? (Probe: always, mostly, sometimes, rarely, never)

[IF B4 > NEVER]

a. What types of firms do you use?

b. For what types of projects?

c. What functions do they fulfill?

d. [IF PUBLIC AND PRIVATE] Does this differ for public sector projects and private sector projects? If so, how?

B5. Does your firm sub-contract to other firms?

[IF B5 = YES]

a. What types of firms do you partner with?

b. For what types of projects?

c. What function do you fulfill?

d. [IF PUBLIC AND PRIVATE] Does this differ for public sector projects and private sector projects? If so, how?

B6. [IF B1b = YES] You said that your firm specializes in the [READ IN FROM B1b] market segment(s). Other than customers within those segments, what criteria do you use when targeting potential opportunities?

[IF B1b = NO] Can you briefly describe the criteria you use to determine which opportunities to target?

B7. How long is a typical business development cycle—from first contact with a customer to having a signed contract in hand? Does this vary by market segment? How?

B8. What are the most common contracting models that your firm uses for non-residential energy efficiency projects? (Probe: design-build, design-bid-build, performance contracting, construction manager at risk.)

a. [IF PUBLIC AND PRIVATE] Does this differ for public sector projects and private sector projects? If so, how?

B9. What are the most common financing options that your customers use? (Probe: loan financing, lease financing, utility on-bill financing, C-PACE financing, energy services agreement.)

a. [IF PUBLIC AND PRIVATE] Does this differ for public sector projects and private sector projects? If so, how?

b. Has this changed over time? How? Why?

- B10. Are there any emerging project financing models or creative financing solutions that you have observed? (IF NEEDED: For example, some firms offer options to own and maintain a portion of a building's operating equipment as a means of financing large capital improvements to the most energy-intensive or costly equipment.)
- a. Are any of these emerging financing offerings more popular with public- or private-sector customers? Are there any particular market segments that seem more or less interested in these options?

B11.

- a. What percentage of your [PUBLIC/PRIVATE] sector projects leverage utility program incentives?
- b. And what percentage of those projects would not have moved forward without the utility incentives?

	Public	Private
(a) % that leverage utility incentives		
(b) % that would not have gone forward without utility incentives		

B12.

- a. What percentage of your [PUBLIC/PRIVATE] sector projects take advantage of other external funding sources (for example, incentives from the state or federal government, or grants)? (Record type of other external funding.)
- b. And what percentage of those projects would not have moved forward without that funding?

	Public	Private
(a) % that uses other external funding		
(b) % that would not have gone forward without other external funding		

### SIZE OF NY STATE ESCO MARKET/COMPETITIVE LANDSCAPE

C1. Thinking about the two different types of ESCO firms that we discussed at the beginning of the interview, can you estimate how many of each type operate in NY State?

- a. Number of traditional ESCOs:
- b. Number of engineering design-build firms:

C2. Other than these firms, what types of companies are your main competitors for work...

- a. [IF PUBLIC] In the public sector?
- b. [IF PRIVATE] In the private sector?



- C3. Are there emerging business models in the market for ESCO projects?
- C4. How has the market for non-residential building improvements changed over time? Why? (Probe with C4a and C4b if not answered here.)
  - a. Has the size of the market changed over time? If so, why?
  - b. Are there emerging opportunities for new types of business or services in the market? If so, what are they?

**DRIVERS AND BARRIERS**

- D1. What are the drivers of ESCO project implementation in NY State?
  - a. How do these drivers differ for the various market segments that your firm serves?
- D2. What are the barriers to ESCO project implementation in NY State?
  - a. What are barriers that prevent your firm from pursuing more projects in NY State?
  - b. What are barriers that prevent your customers from completing more energy efficiency projects with firms like yours?
  - i. From your understanding of your customers' priorities, what competes with energy efficiency for funding?
  - c. What are the barriers to installing deeper savings measures in your firm's projects?
  - d. [\[IF PUBLIC AND PRIVATE\]](#) Do any of these barriers differ between your firm's public and private sector customers?

[\[ASK F B1b = MULTI-FAMILY\]](#)

- D3. Are there specific challenges working with the multi-family market segment? If so, what are they?
  - a. Has your firm developed any strategies for completing more work with multi-family buildings?

[\[ASK D4 IF B1b <> MULTI-FAMILY\]](#)

- D4. Is there any reason why your firm does not typically complete projects in the multi-family segment?
- D5. What percentage of your [\[PUBLIC/PRIVATE\]](#) customers turn into repeat customers?

Sector	Percent
Public	
Private	

- a. What would you say are the drivers that turn a customer into a repeat customer?  
*(Probe: specific services your firm offers, your business model)*
  - b. For customers that don't turn into repeat customers, what are the main reasons?
  - i. To the best of your knowledge, do some those customers complete projects with other ESCOs?
- D6. Are there different challenges that your firm faces at the different phases of a typical project? If so, what are they? (Probe for the following phases.)
- Lead generation
  - Business Development
  - Contracting
  - Implementation
  - Commissioning
  - Measurement and Verification
- D7. Do you see any broader barriers to completing more ESCO projects that are inherent to the market? If so, what are they?

### **DELPHI PANEL**

[ASK IF RESPONDENT WAS KNOWLEDGEABLE/SEEMS LIKE A GOOD CANDIDATE FOR THE DELPHI PANEL]

- E1. As part of this study, we will be convening a small expert panel to help us dive deeper into some of the topics we discussed today. This panel will be comprised of representatives from firms like yours that have a lot of experience in the field and are able to share their perspectives, specifically on the size of the markets that you serve. Members of this panel will be asked to comment on some of the findings from these interviews, along with our other research for this market assessment.
- a. Would you be willing to be part of this panel?
  - b. [IF NO] Is there anyone else at your firm that you think might be a good fit for this panel?
  - i. [IF YES, RECORD ALTERNATIVE CONTACT INFORMATION AND ASK FOR INTRODUCTION VIA EMAIL]

*Those are all the questions I have. Thank you so much for your participation!*



# **SECTION 6B**

Industry Expert In-Depth  
Interview Guide

# Industry Expert In-Depth Interview Guide

## Introduction

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The purpose of this interview is to gather information from industry experts to support a market assessment, conducted by NYSERDA, of energy services company (ESCO) activity in the New York State non-residential energy efficiency market. For the purposes of this study, we have defined ESCOs as firms that provide energy efficiency services, and other related services, and for whom performance contracting makes up a core part of their energy services business.

*[NOTE: Key questions are marked with an asterisk (\*). If we cannot cover all topics in a given interview, we will focus on these questions.]*

*We have also added some questions to this interview guide that will only be asked of experts who also represent ESCOs; marked with a caret (^).]*

### IF NEEDED:

- **TOPICS COVERED:** This market assessment will address the size of the NY State ESCO industry, ESCO operations, the ESCO competitive and regulatory landscape in NY State, and drivers and barriers to ESCO project implementation.
- **ESCO DEFINITION:** Firms that provide energy efficiency-related and other value-added services and for which performance contracting makes up a core part of its energy-efficiency services business. [IF NEEDED: Note that this market assessment only includes ESCOs that provide energy-efficiency, or related, services. This study does not include other companies, such as retail energy providers, that may also be referred to as energy services companies.]
- **PERFORMANCE CONTRACTING DEFINITION:** A mechanism that allows building owners and managers to make energy efficiency upgrades in their facility and make regular payments to the ESCO to repay the cost of the project, based on levels of energy savings guaranteed by the ESCO.

### BACKGROUND

1. Please tell me about your background and your current role at [COMPANY/ ORGANIZATION].
2. How long have you been in this role?

## MARKET ACTORS AND SIZE

^ As part of this study, we'll also be contacting a sample of ESCOs that operate in New York State and we have included [COMPANY NAME] in that sample. For the majority of this discussion, we would like to focus on the markets in New York State that ESCOs serve as a whole; however, for a few specific questions we'll ask you to focus on [COMPANY NAME] so that we can make the best use of your time.

I'd like to start by asking you a few questions about the size of the ESCO industry in New York State.

3. \* How many ESCOs would you say operate nationally? [IF NEEDED: A 2013 LBNL report estimated the number to be 45. Does that still sound correct?] How many of these operate in NY State?
  - A. \* Who are the key market actors in NY State, based on the number or size of projects completed?
4. \* Are there types of companies or organizations that do not fit our definition of an ESCO but that compete with ESCOs in the market for energy efficiency upgrades in non-residential buildings? [IF NEEDED: To clarify, we are interested in other types of companies that provide energy efficiency services but not other types of firms that may also be referred to as ESCOs]

[ASK IF YES]

- A. What types of organizations are these?
  - B. How common are they? (Probe: How many are there? What is their market share relative to ESCOs?)
  - C. Why would a building owner or manager elect to complete work with this type of an organization instead of with an ESCO?
  - D. What makes their business model different from the typical ESCO model?
5. What would you say are the key market segments that ESCOs serve in NY State?
  - A. ^ What would you say are the key market segments that [COMPANY NAME] serves in New York State?
  - B. ^ How does the competitive landscape change within each of those market segments for [COMPANY NAME]?
  - C. ^ Are there any market actors that [COMPANAY NAME] competes with in some of those market segments and not others?
6. For this market assessment, we will be gathering information on the size and characteristics of the markets that ESCOs serve in New York State. I'm going to read a list of characteristics. For each, please share your best estimate for New York State as a whole. (READ LIST)

	Characterists	Market Value	^ ESCO Value
A	Total number of projects per year		
B	Average project size (sq. ft.)		
C	Average project cost		
D	Average project energy savings (kWh)		

- i. ^ Now, for each characteristic, please share your best estimates for [COMPANY NAME] in New York State each year. (READ LIST)
- E. Do you think that these metrics – number of projects, space treated, cost/level of investment, and energy savings – are the most relevant measures of market size? Are there any other measures we should consider? (Probe for revenues and use of cost as a measure of investment levels)
  - F. Do you think that ESCOs will be able and willing to share this type of information about their own projects with us? Why or why not?
  - G. [IF NO] Do you have any recommendations for how best to capture this information from ESCOs?
  - H. How else do ESCOs measure their success? (e.g., revenue; earnings before interest, tax, depreciation and amortization (EBITDA); size of projects; number of projects, etc.)
7. Has the size of the NY State ESCO market changed over time? (*Probe for number of ESCOs, number of ESCO projects, project characteristics, segments served*)
- A. [IF YES] How has it changed? What do you think were the main drivers of these changes?

#### ESCO Operations

My next few questions are about ESCO operations in New York State.

- 8. What are the key services that ESCOs provide to New York State building owners and operators?
  - A. How, if at all, have these services changed over time? What do you think were the main drivers of these changes?
- 9. In your experience, how do ESCOs evaluate opportunities in non-residential energy efficiency spaces? [IF NEEDED: Do ESCOs consider building size, total project cost, measure mix, market segment, etc. when considering the types of projects to bid on?]
  - A. Are any of those criteria more or less relevant in New York State? [IF YES] Why?
- 10. What are the primary contracting mechanisms employed by ESCOs completing work in NY State? [IF NEEDED: mechanisms such as performance-based contracts, design/build or “turnkey” contracts, utility program administration, generic consulting contracts, onsite generation or PPA]
  - A. Do different contracting mechanisms appeal to different market segments? Please describe.
  - B. Over the past several years, would you say that the contracting mechanisms employed by ESCOs when working in NY State have changed?
    - i. [IF YES] How have they changed? What do you think were the main drivers of these changes?

- C. Do ESCOs typically leverage utility rebate, or incentive, programs as an additional source or funding? [IF YES] Can you describe how this would work in conjunction with a longer term performance contract?
  - i. ^ What percent of [COMPANY NAME]'s projects take advantage of utility program or public funding? Does this change for any of the key market segments we've discussed so far? If so, how?
  
- 12. In your experience, is it common for ESCOs to develop formal or informal partnerships with other companies or organizations to generate business in NY State? [IF NEEDED: For example, an ESCO may create an agreement with a lighting manufacturer to use their products in exchange for leads.]
  - A. [IF YES] What types of organizations?
  - B. [IF YES] Do these partnerships include aggregation of small to medium sized businesses or buildings?
  - C. [IF YES] What services do these organizations provide to ESCOs? What value do they add to ESCO's non-residential customers?
  - D. Are there other opportunities to bolster the ESCO market upstream through a partnership with an organization like NYSERDA?

### MARKET DRIVERS AND BARRIERS

- 13. \* What are the main factors that drive ESCO activity in New York State? [IF NEEDED: "We are interested in learning about what types of policies, programs, or other market dynamics contribute to growth in ESCO activity in the State"]
  - A. How do these factors differ from other parts of the country?
  - B. Do these differ for different market segments?
  
- 14. Why would a building owner or manager elect to complete work with an ESCO, rather than through another avenue?
  - A. Do those reasons differ by market segment? If so how?
  - B. Do they differ by location within the State? If so, how? (Probe: downstate NY versus upstate NY)
  
- 15. And what are the main factors that inhibit ESCO activity in New York State?  
Probe for:
  - A. What are market-specific barriers? (Probe: utility regulations governing performance contracting—NYPA vs. Con Edison or others)
    - i. Are there market entry barriers that are unique to New York State?
  - B. What are the specific barriers to project implementation? (by project phase: prospecting, sales, contracting, installation, Cx, M&V, meter data collection, etc.)
    - i. ^Do any of those project-level barriers that you mentioned effect [COMPANY NAME] projects more than others? If so, how?
  - C. What are customer-centric barriers?
  
- 16. \* Are you aware of any specific market segments in New York State that ESCOs have trouble addressing? Which segments? Why have they been difficult to reach? (Probe for ESCO activity in commercial buildings)

## NEW YORK STATE POLICY FACTORS

Now I'd like to focus specifically on the New York State policy and regulatory landscape.

17. Are there specific regulations or policies that are affecting New York's non-residential ESCO market today?
  - A. [IF YES] What are these? (Probe for REV) How do they influence ESCO activity in the State? (Probe: Do these factors drive or inhibit the growth of the ESCO industry in New York State?)
  - B. How do you see the regulatory and policy environment changing, if at all, in the future with the continued roll-out of the REV filing?
  
18. Are there other New York municipal, county, or state policies that influence the ESCO industry that we haven't discussed yet? [IF NEEDED: For example, tax credits, city ordinances, utility energy efficiency programs, NYSERDA programs, NYISO programs (NYPA?) etc.]
  - A. [IF YES] What are these? How, in your view, do they influence ESCO activity in the State? (Probe: Do these factors drive or inhibit the growth of the ESCO industry in New York State?)
  
19. Are there any market segments that are more or less affected by NY regulations and policies? Which segments?
  
20. \* How does the regulatory and policy environment in New York compare with other states in the U.S.?
  
21. ^ On a scale of 0 to 10 where 0 is very unfamiliar and 10 is very familiar, how would you rate customers' familiarity with the services that [COMPANY NAME] offers?
  - A. ^ Overall, what percentage of your New York State customers have worked with an ESCO before? Does that share change for any of the key market segments we've discussed? If so, which ones?
  - B. ^ Overall what percentage of your New York State customers turn into repeat customers? Does that share change for any of the key market segments we've discussed? If so, which ones?

## LBNL SECTION

[ASK SECTION FOR LBNL INTERVIEW, ELSE SKIP TO CLOSING SECTION]

As part of this study we have completed a secondary data review. One of the sources that we used is the 2013 LBNL study—Current Size and Remaining Market Potential of the U.S. Energy Service Company Industry. For these next few questions, I'd like to focus on the methods and data sources used for that study, and if you have any advice for us as we continue to collect information.

22. What was the most effective method for contacting and gathering information from the ESCOs you interviewed?
  - A. Did you focus on any specific role at ESCOs when developing your sample? [IF NEEDED: For example, project management, business development, executive management, etc.]



23. To the best of your knowledge, did survey respondents or Delphi panel participants have any trouble or reluctance reporting market size information such as revenues, costs, savings, or other key figures?
24. What worked well during your Delphi Panel and what would you change if re-convening the panel today?
  - A. Is there anyone specific that you would recommend we include in our Delphi panel, based on their knowledge of the NY ESCO market?
25. Would it be possible to share any of the data you compiled on ESCOs for the 2013 study, or any subsequent ESCO work that LBNL has conducted, such as:
  - A. ESCO names and representative contact information
  - B. NY-specific ESCO project data – this could be in aggregate, such as annual number of projects, annual savings, annual revenues, etc.
  - C. Or any other materials that might be useful in creating an updated New York-specific version of the 2013 report

### **CLOSING SECTION**

26. [IF SKIPPED LBNL SECTION, ASK] One of our next steps is to develop a sample of ESCOs operating in New York State and identify appropriate contacts. Do you have any suggestions of good data sources for this?

A. Do you have any suggestions for other public data sources that might be useful?

27. Is there anything else that we have not discussed that you think is important for us to know while conducting this study?

^ Thank you again for being so gracious with your time. As I mentioned in the beginning of this discussion, we are planning on reaching out to a sample of ESCOs that operate in New York State with some more specific questions. We've covered most of those topics here, but, if it is OK with you, I may have a few more details that I'd like to follow up on via email.



# **SECTION 6C**

Delphi Panel Online  
Questionnaire

# Delphi Panel Online Questionnaire

## Introduction

Welcome to Round 2 of the NYSERDA expert panel on comprehensive energy efficiency services for non-residential buildings in New York State! In this second and final round, we will conduct a short interview with each panel member. The interview will build on the information the panel had provided in the Round 1 survey. (Thank you again for completing that survey!)

As with the survey, the first part of this interview addresses energy efficiency projects completed in public sector buildings, while the second part addresses energy efficiency projects completed in private sector buildings. As a reminder, we define these as follows:

**Public Sector:** Non-residential buildings owned or operated by government entities in segments including (but not limited to) public schools, public universities/colleges, public multifamily housing, or municipal buildings.

**Private Sector:** Includes non-residential buildings owned or operated by private entities in segments including (but not limited to) private universities/colleges, private medical campuses/hospitals, commercial office space, hospitality, and private multifamily housing.

Similar to Round 1, throughout this interview, we will refer to two different types of firms that operate in the non-residential energy efficiency market:

- a. **Traditional ESCOs.** Firms that provide a comprehensive set of turnkey services, including energy efficiency-related and other value-added services and for which performance contracting makes up a core part of its energy-efficiency services business.
- b. **Engineering/Design-build Firms.** Firms that may act as general contractors or consultants. They provide recommendations to the building ownership and play a role as project manager subcontracting the implementation to end-use specific contractors. They can design turnkey projects for a variety of end-uses (e.g., lighting, HVAC, envelope, or controls).

In this interview we will review the preliminary results we have developed for various market characteristics and will ask you to comment on them. These results were developed from the responses to the Round 1 survey completed by this panel. We have developed figures showing the responses from the Round 1 survey, and I had emailed you this information prior to this interview. For each of the characteristics that we will discuss in this interview, we show the actual responses, the mean, and our “preliminary estimate.” Our “preliminary estimate” is generally a rounded mean with outliers removed. For each of the figures below, we will ask you to consider (1) if the preliminary estimates are reasonable; (2) if not, what would be a better estimate; and (3) your thinking as to why the preliminary estimate is or is not reasonable.

Please note that all answers you provide in this interview will be kept confidential to the extent allowable by law and will only be reported in aggregate or anonymized fashion. With your permission I will record and transcribe this interview for notetaking purposes.

NOTE TO REVIEWERS: The questions below are not designed to be read verbatim. Instead, the interviewer will follow the conversational flow and ensure that all quantitative estimates and qualitative feedback are captured for each module.

## Public Sector

### PUBLIC SECTOR FIRM AND PROJECT COUNTS

To start I would like to ask you about the count of firms and the number of projects they complete in public sector buildings.

**FIGURE 1.** | Number of Firms Completing Projects in Public Sector Buildings

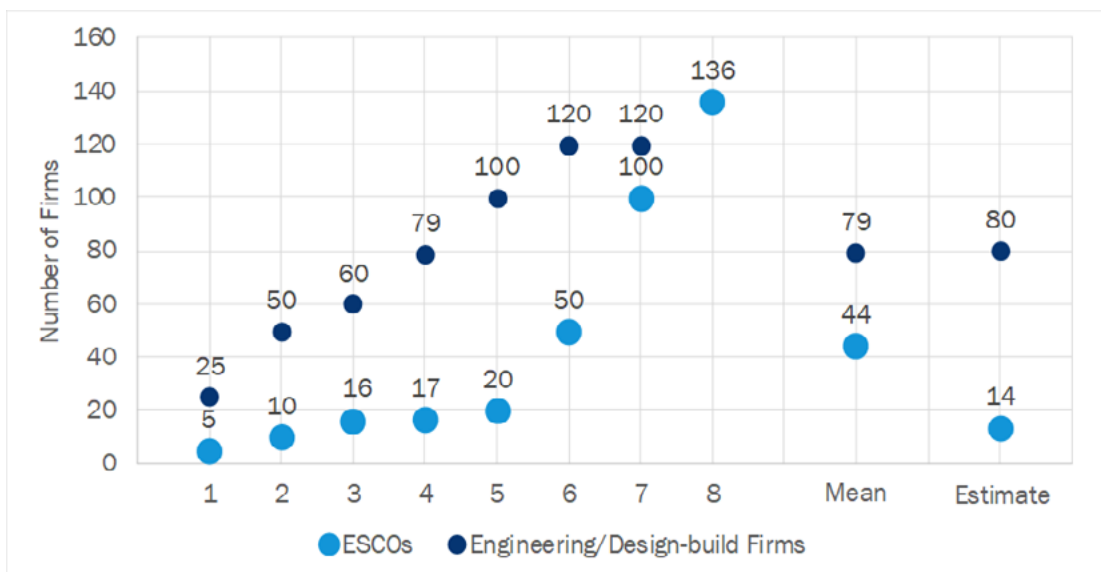


Figure 1 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of ESCOs and Engineering/Design-build Firms that complete projects in public sector buildings.

- Q1) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q1a) Number of ESCO Firms:
- Q1b) Number of Engineering Design-build Firms:
- Q2) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 2. |** Number of Projects Completed in Public Sector Buildings Annually

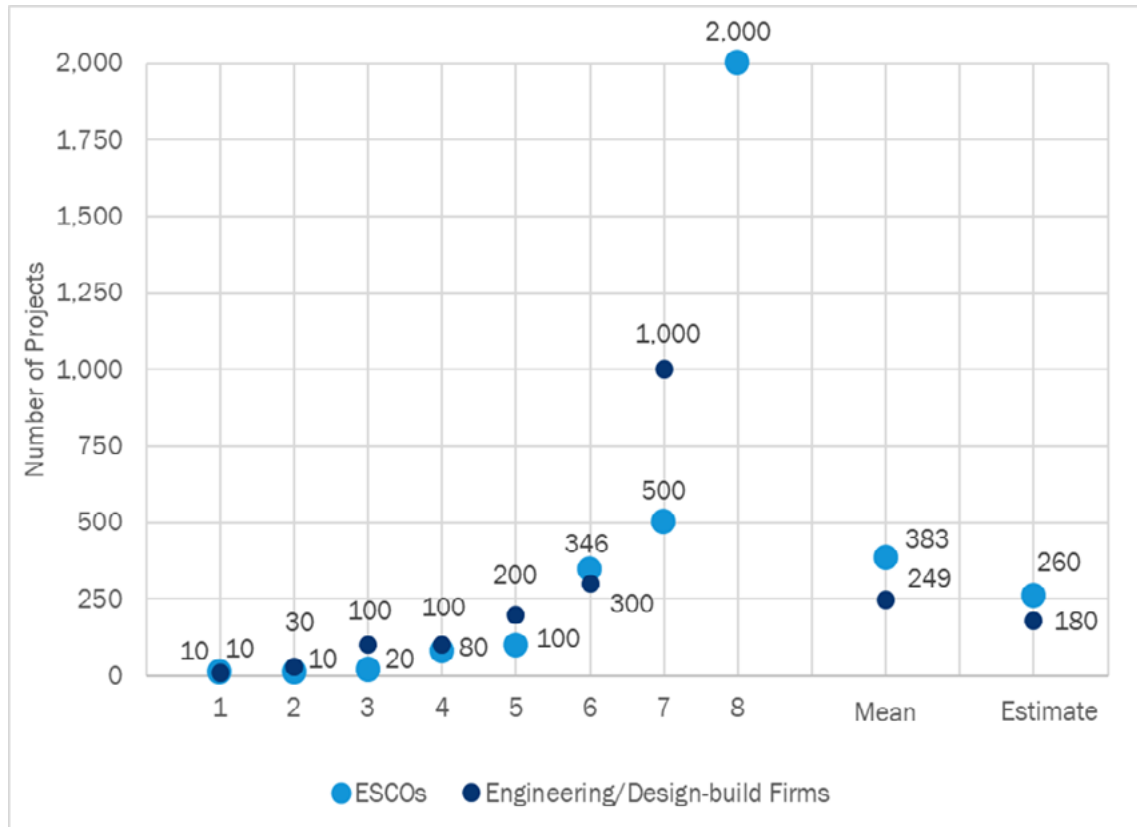


Figure 2 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of projects completed annually by ESCOs and Engineering/Design-build Firms in public sector buildings.

- Q3) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q3a) Number of projects completed by ESCOs:
- Q3b) Number of projects completed by Engineering/Design-build Firms:
- Q4) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

### **PUBLIC SECTOR REVENUES**

Now I would like to ask you to review estimates on the annual revenues for projects completed in public sector buildings, and the types of market segments that account for different shares of those revenues.

**FIGURE 3.** | Total Annual Revenues from Projects Completed in Public Sector Buildings

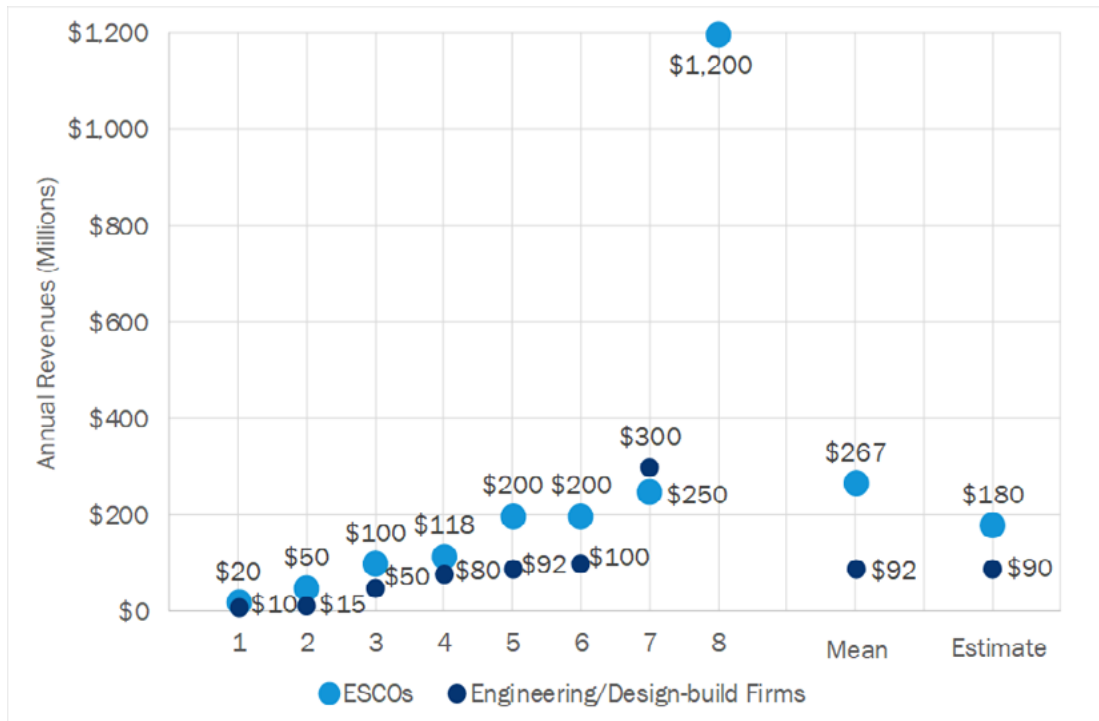


Figure 3 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the total annual revenues from public sector projects for both ESCOs and Engineering/Design-build Firms.

- Q5) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q5a) Public sector revenues for ESCOs:
- Q5b) Public sector revenues for Engineering/Design-build Firms:
- Q6) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 4.** | Share of Annual Revenues by Public Sector Market Segment, ESCOs

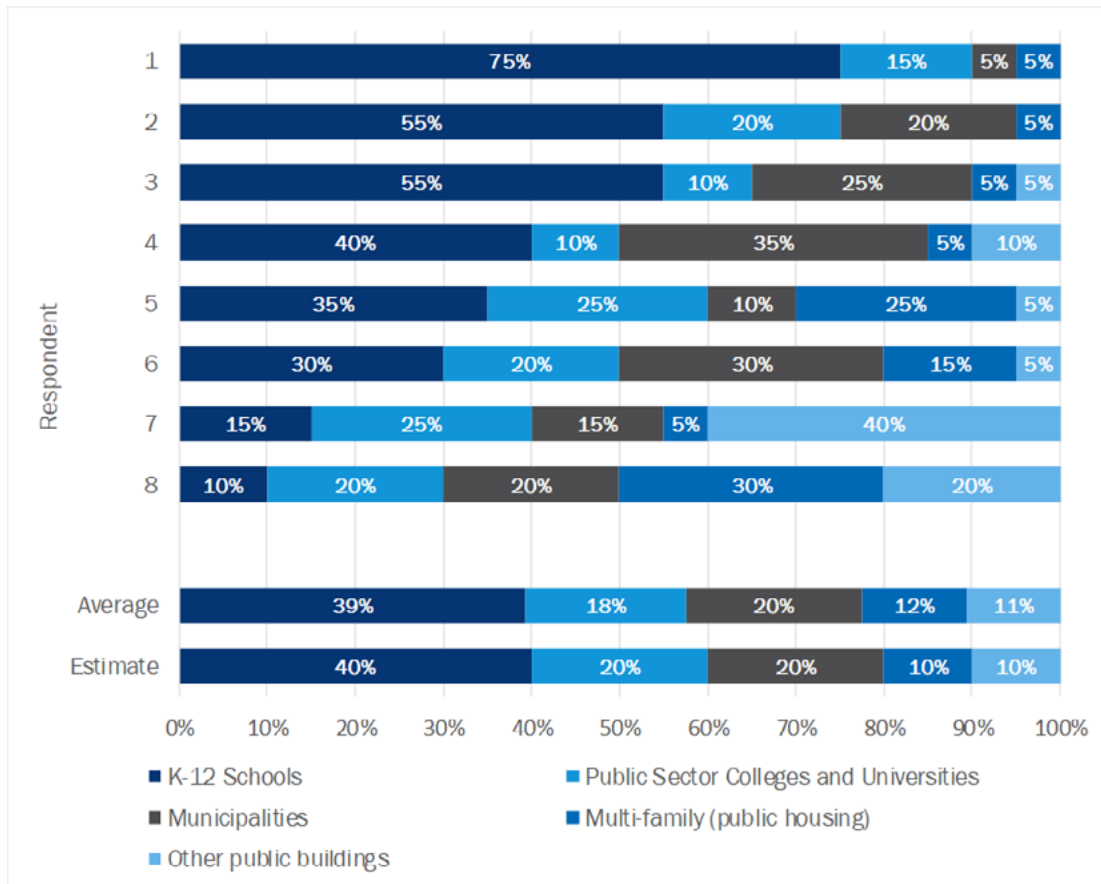


Figure 4 above shows the responses from the Round 1 survey on the share of revenues for ESCOs that come from different public sector market segments (K-12 schools, public sector colleges and universities, municipalities, multi-family or public housing, and other public buildings).

Q7) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

K-12 Schools	Public Sector Colleges and Universities	Municipalities	Multi-family (public housing)	Other public buildings

Q8) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 5.** | Share of Annual Revenues by Public Sector Market Segment, Engineering/Design-build Firms

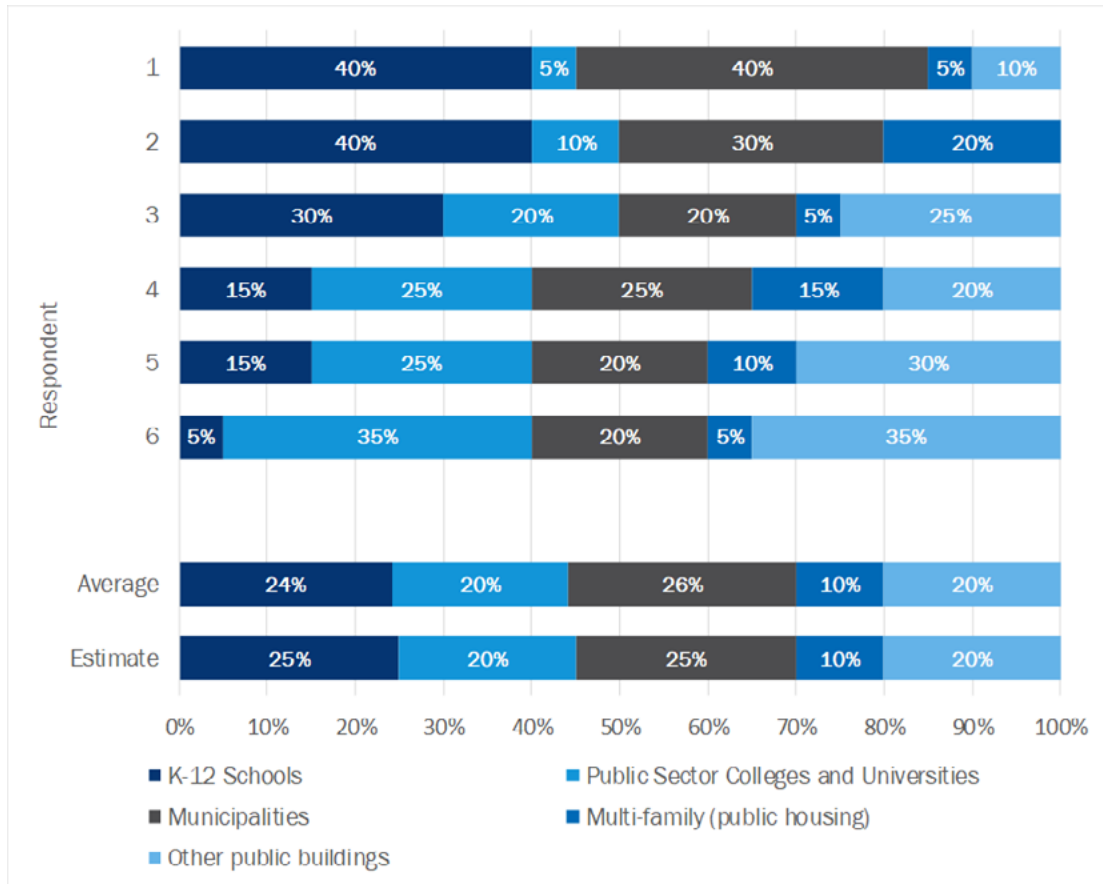


Figure 5 above shows estimates from the Round 1 survey on the share of revenues for Engineering/Design-build Firms that come from different public sector market segments (K-12 schools, public sector colleges and universities, municipalities, multi-family or public housing, and other public buildings).

Q9) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

K-12 Schools	Public Sector Colleges and Universities	Municipalities	Multi-family (public housing)	Other public buildings

Q10) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]



## PUBLIC SECTOR BUILDING SIZES

Now I would like to ask you to review responses, mean values, and preliminary estimates on the share of projects that are within the square footage ranges presented the chart below.

**FIGURE 6.** I Share of Public Sector Projects by Size Category, ESCOs

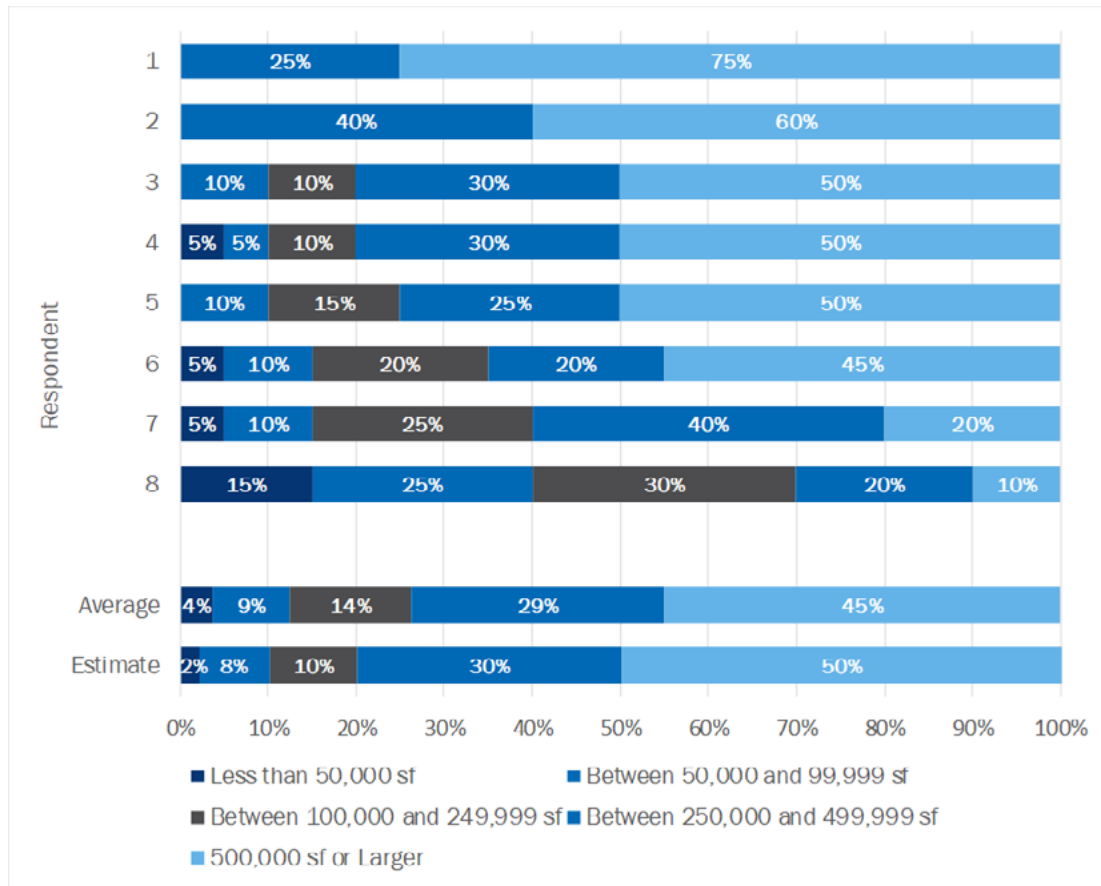


Figure 6 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in public sector buildings annually by ESCOs. Size categories are presented as square footage treated by the project.

Q11) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 50,000 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	Between 250,000 and 499,999 SF	500,000 SF or Larger

Q12) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 7.** | Share of Public Sector Projects by Size Category, Engineering/Design-build Firms

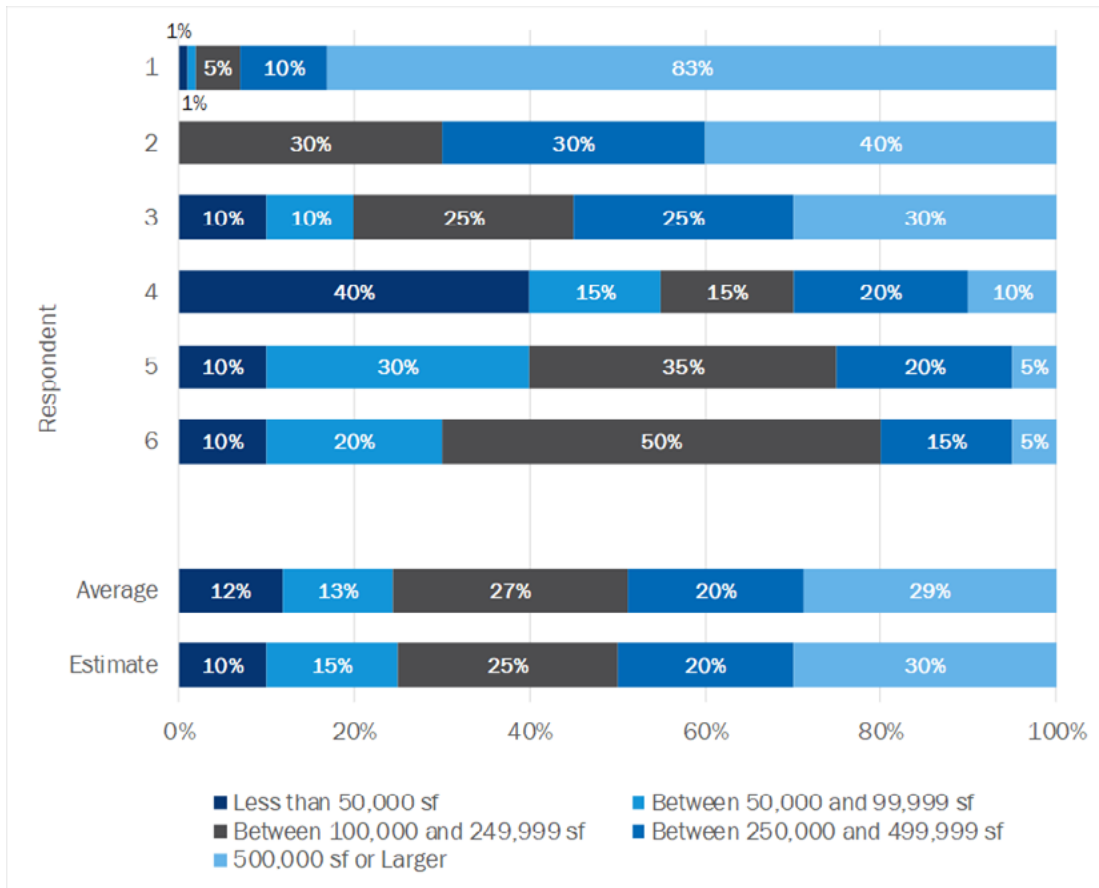


Figure 7 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in public sector buildings annually by Engineering/Design-build Firms. Size categories are presented as square footage treated by the project.

Q13) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 50,000 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	Between 250,000 and 499,999 SF	500,000 SF or Larger

Q14) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**PUBLIC SECTOR PROJECT SAVINGS**

Now I would like to ask you to review responses, mean values, and preliminary estimates on public sector project savings.

**FIGURE 8.** | Share of Public Sector Projects by Annual kWh Usage Savings Category, ESCOs

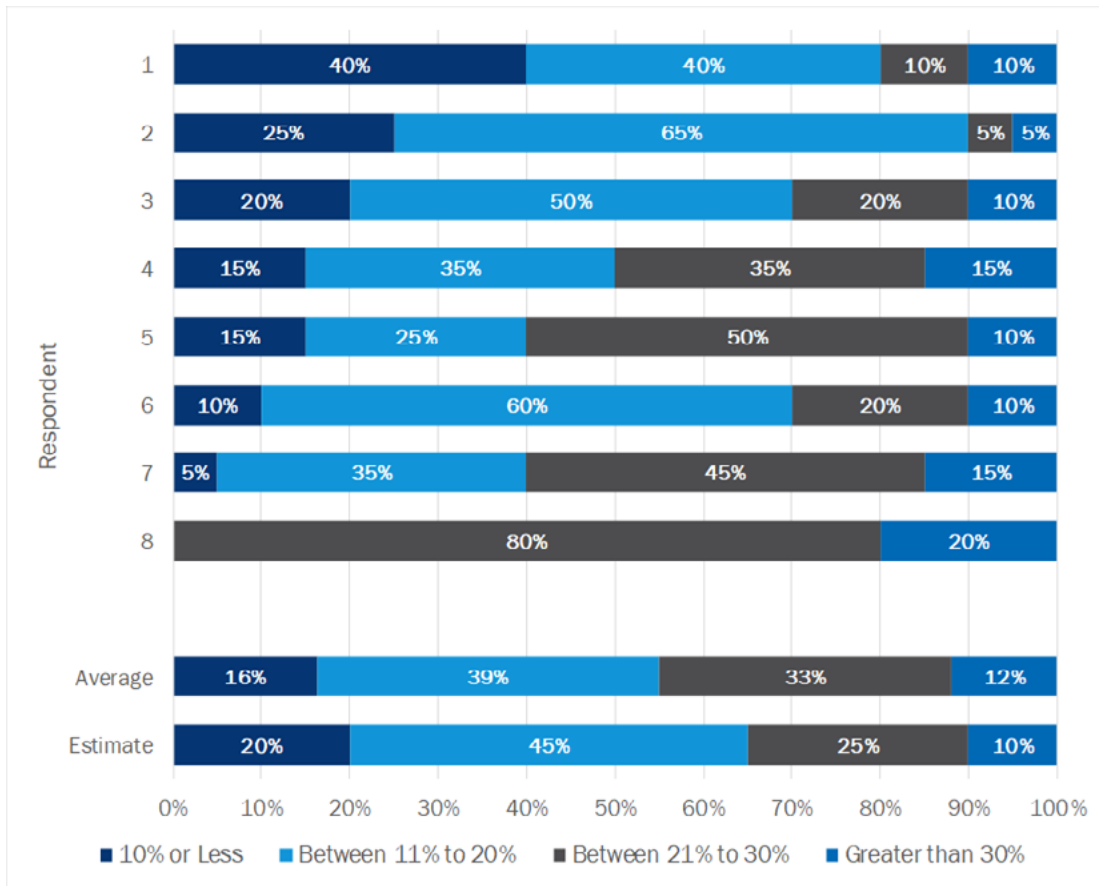


Figure 8 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector ESCO projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q15) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 50,000 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	Between 250,000 and 499,999 SF	500,000 SF or Larger

Figure 8 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector ESCO projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q16) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 9.** | Share of Public Sector Projects by Annual kWh Usage Savings Category, Engineering/Design-build Firms

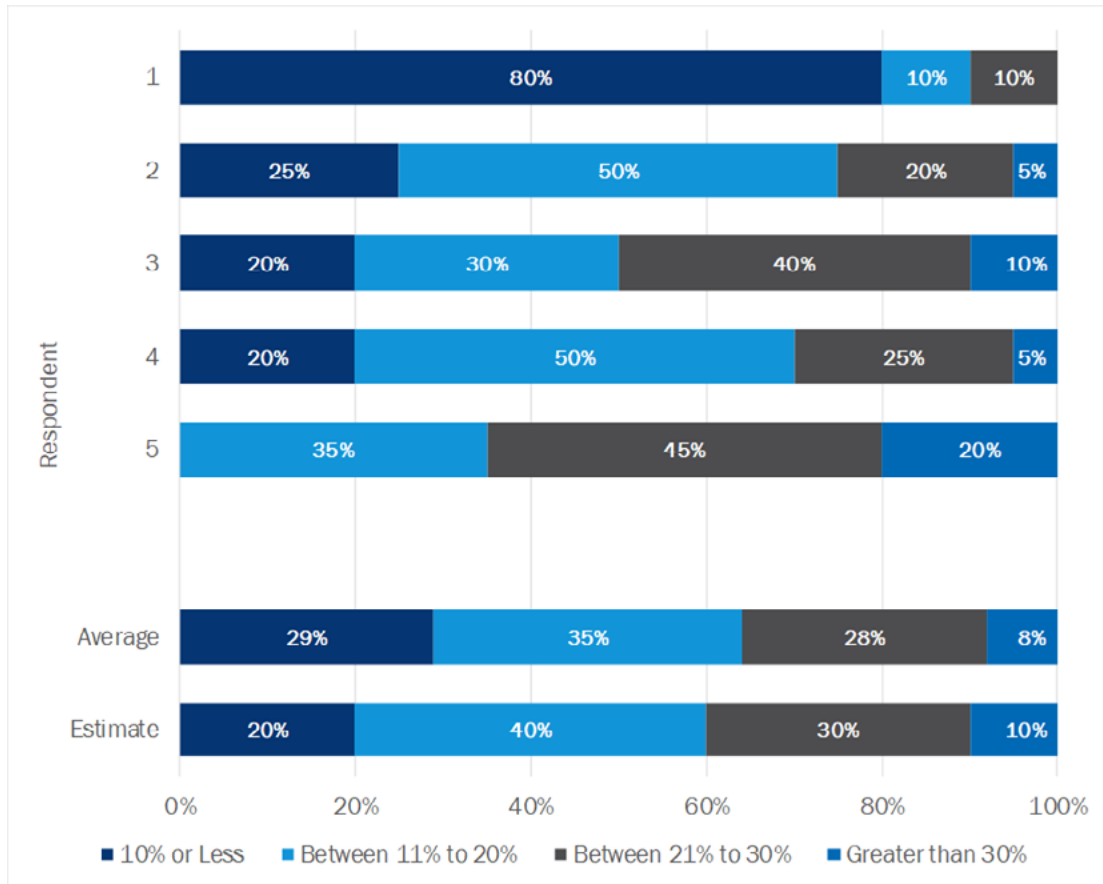


Figure 9 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector Engineering/Design-build projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q17) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%	500,000 SF or Larger

Q18) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## Private Sector

The next part of this interview is about comprehensive energy efficiency projects completed in the private sector.

### PRIVATE SECTOR FIRM AND PROJECT COUNTS

To start, I would like to ask you about the count of firms and the number of projects they complete in private sector buildings.

**FIGURE 10.** I Number of Firms Completing Projects in Private Sector Buildings

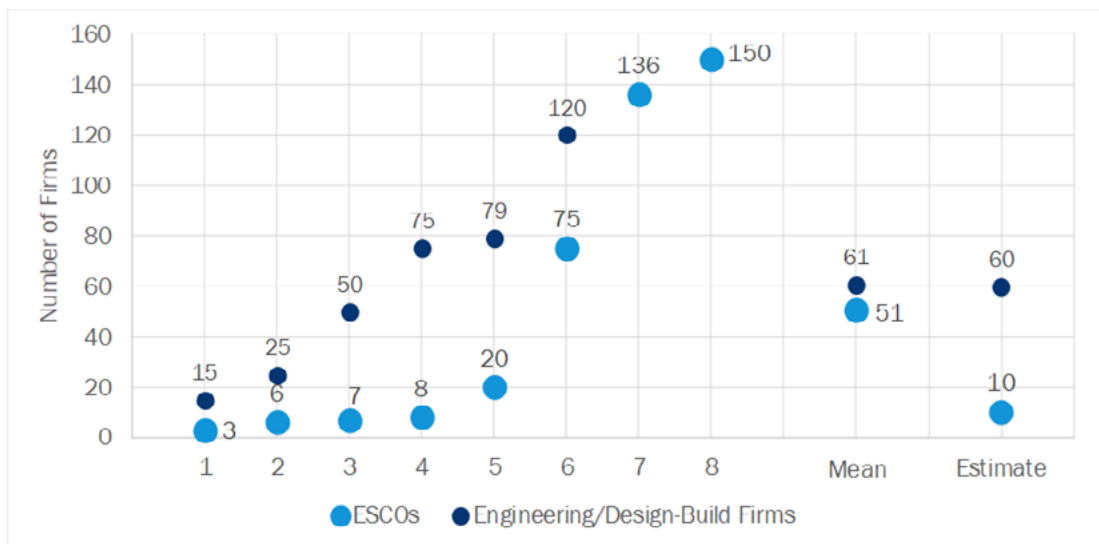


Figure 10 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of ESCOs and Engineering/Design-build Firms that complete projects in private sector buildings

- Q19) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q19a) Number of ESCO Firms:
- Q19b) Number of Engineering Design-build Firms:
- Q20) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 11.** I Number of Projects Completed in Private Sector Buildings Annually

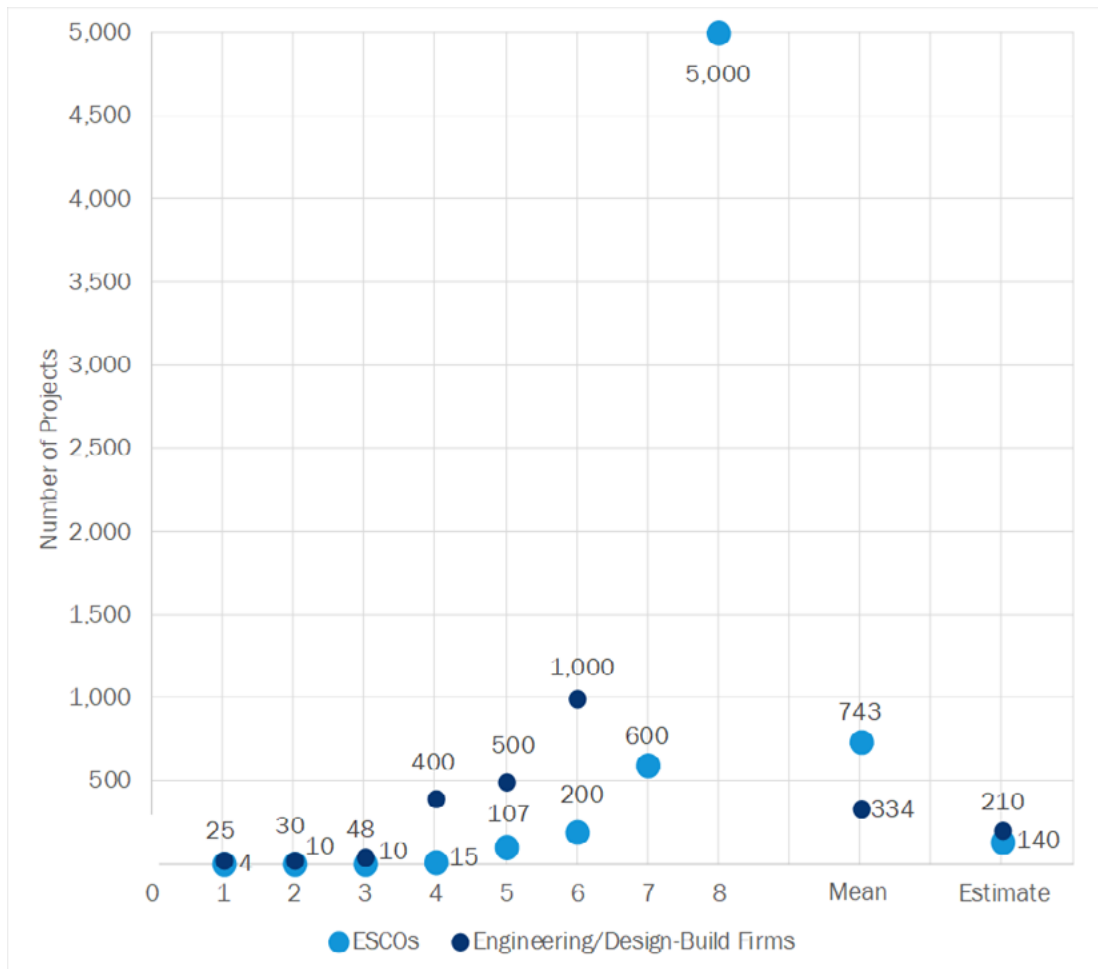


Figure 11 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of projects completed annually by ESCOs and Engineering/Design-build Firms in private sector buildings.

- Q21) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q21a) Number of projects completed by ESCOs:
- Q21b) Number of projects completed by Engineering/Design-build Firms:
- Q22) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

### PRIVATE SECTOR REVENUES

Now I would like to ask you to review estimates on the annual revenues for projects completed in private sector buildings, and the types of market segments that account for different shares of those revenues.

## PRIVATE SECTOR REVENUES

Now I would like to ask you to review estimates on the annual revenues for projects completed in private sector buildings, and the types of market segments that account for different shares of those revenues.

**FIGURE 12.** I Total Annual Revenues from Projects Completed in Private Sector Buildings

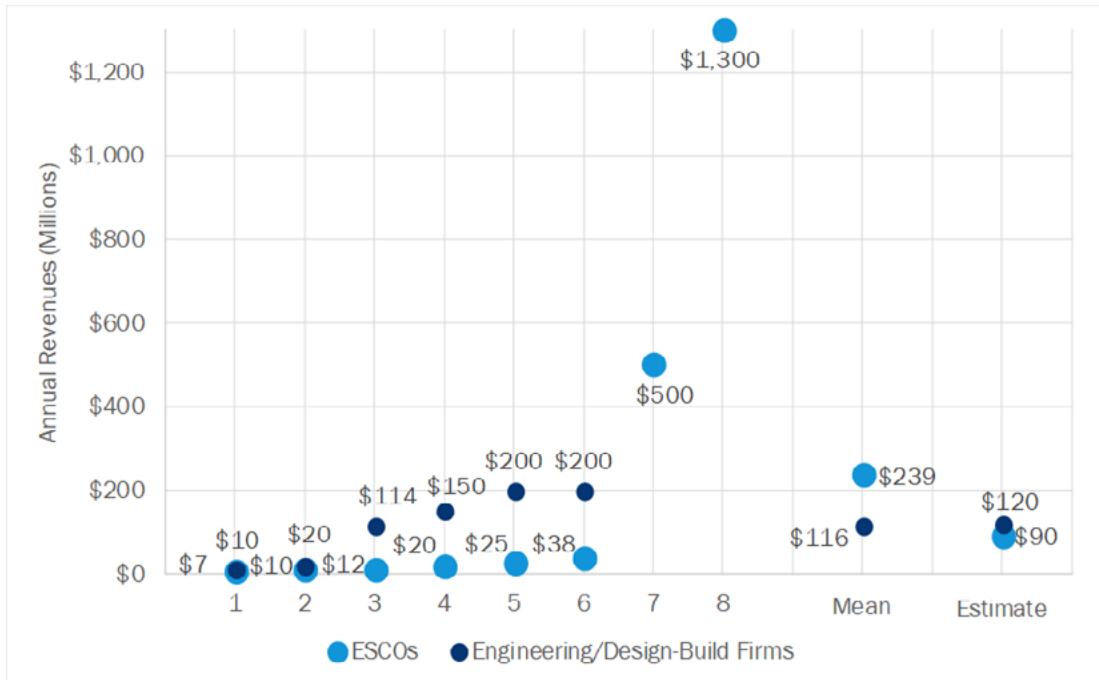


Figure 12 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the total annual revenues from private sector projects for both ESCOs and Engineering/Design-build Firms.

- Q23) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q23a) Private sector revenues for ESCOs:
- Q23b) Private sector revenues for Engineering/Design-build Firms:
- Q24) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 13.** | Share of Annual Revenues by Private Sector Market Segment, ESCOs

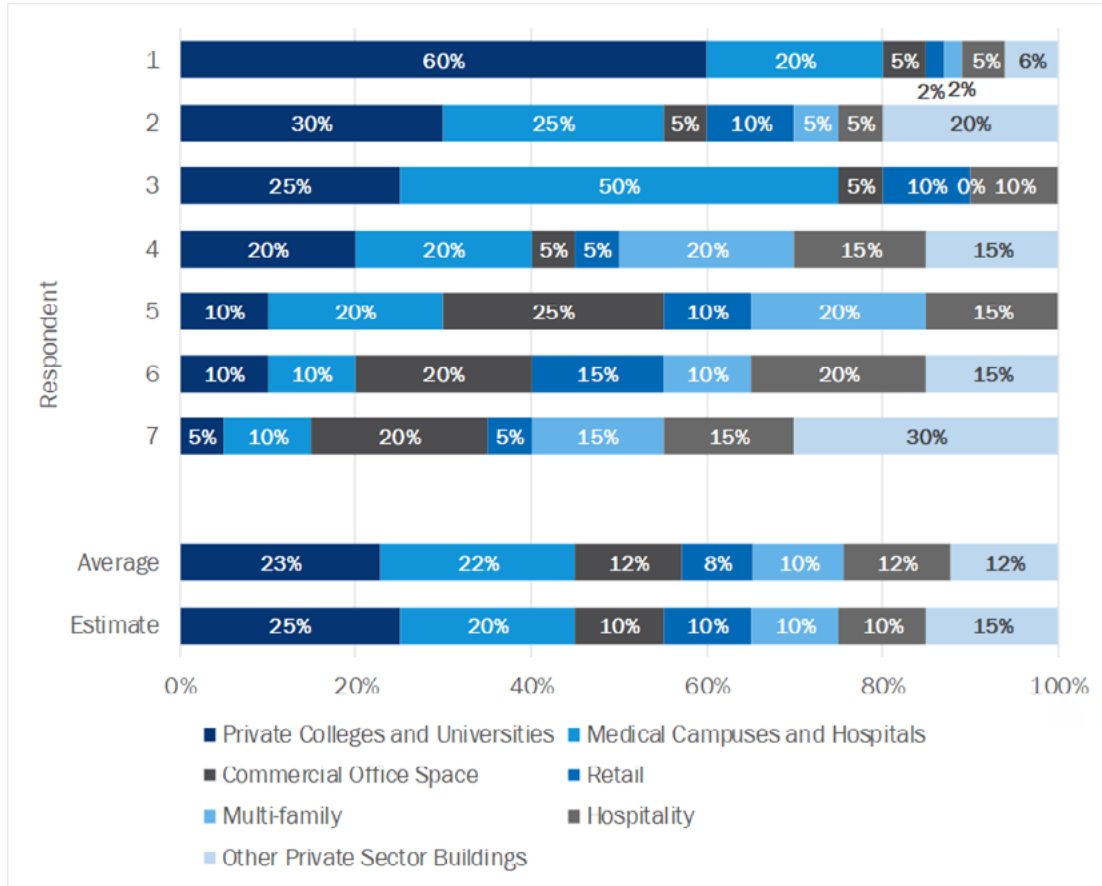


Figure 13 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the share of revenues for ESCOs that come from different private sector market segments (private colleges and universities, medical campuses and hospitals, commercial office space, retail, multi-family, hospitality, and other private sector buildings).

Q25) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Private Colleges & Universities	Medical Campuses & Hospitals	Commercial Office Space	Retail	Multi-family	Hospitality	Other Private Sector Buildings

Q26) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]



**FIGURE 14.** | Share of Annual Revenues by Private Sector Market Segment, Engineering/Design-build Firms

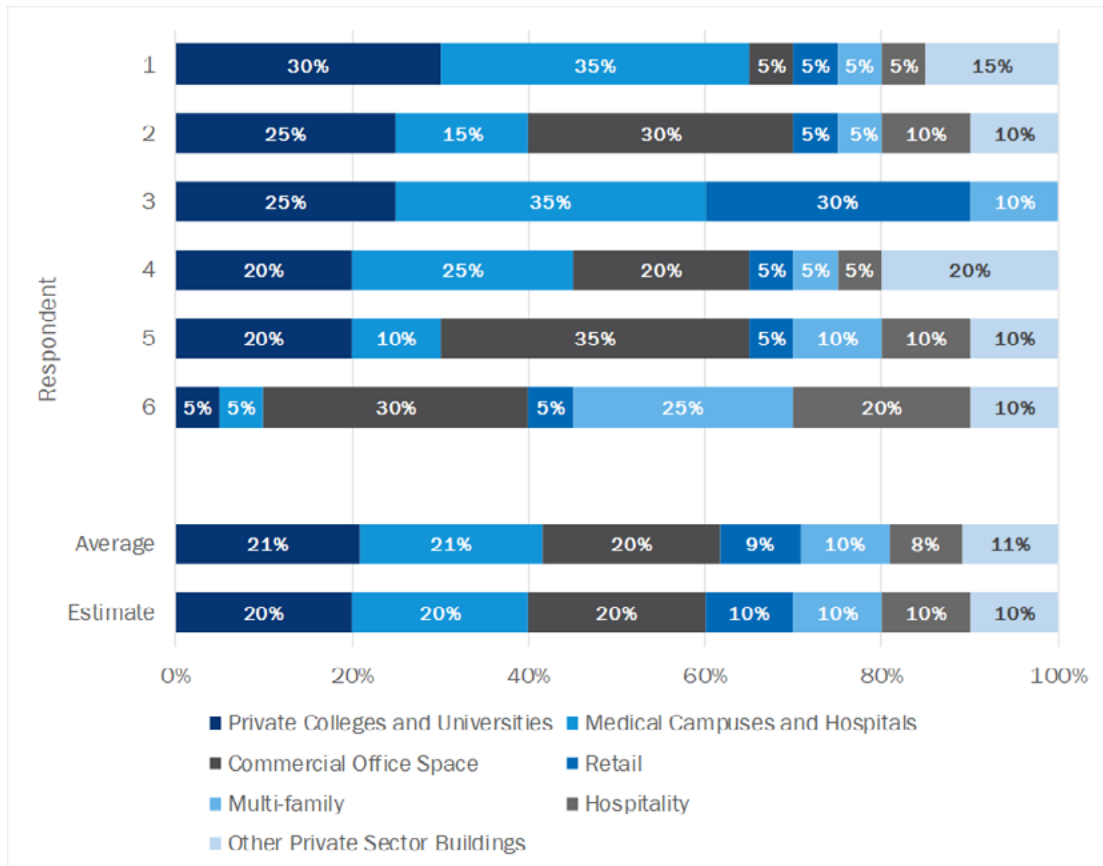


Figure 14 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the share of revenues for Engineering/Design-Build Firms that come from different private sector market segments (private colleges and universities, medical campuses and hospitals, commercial office space, retail, multi-family, hospitality, and other private sector buildings).

Q27) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Private Colleges & Universities	Medical Campuses & Hospitals	Commercial Office Space	Retail	Multi-family	Hospitality	Other Private Sector Buildings

Q28) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## PRIVATE SECTOR BUILDING SIZES

Now I would like to ask you to review responses on the share of projects that are within the square footage ranges presented in the chart below.

**FIGURE 15.** | Share of Private Sector Projects by Size Category, ESCOs

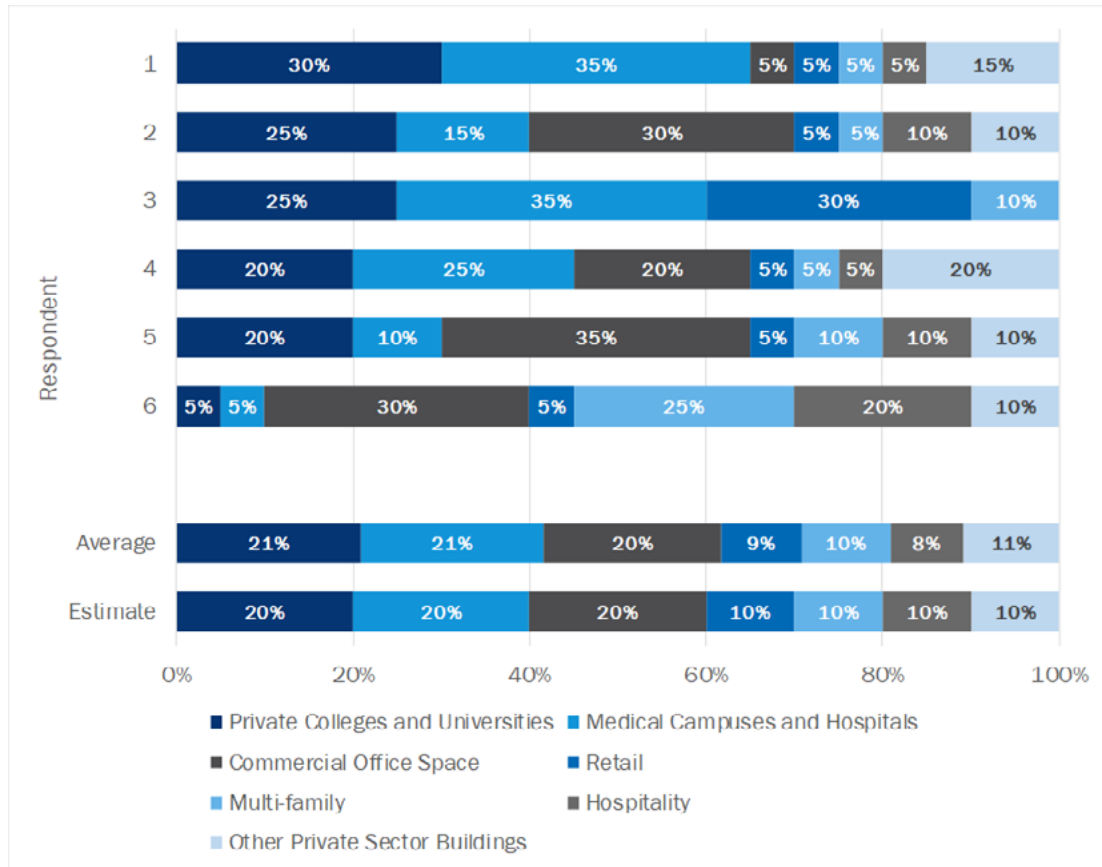


Figure 15 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in private sector buildings annually by ESCOs. Size categories are presented as square footage treated by the project.

Q29) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 10,000 SF	Between 10,000 and 49,999 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	250,000 SF or Larger

Q28) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 16.** | Share of Private Sector Projects by Size Category, Engineering/Design-build Firms

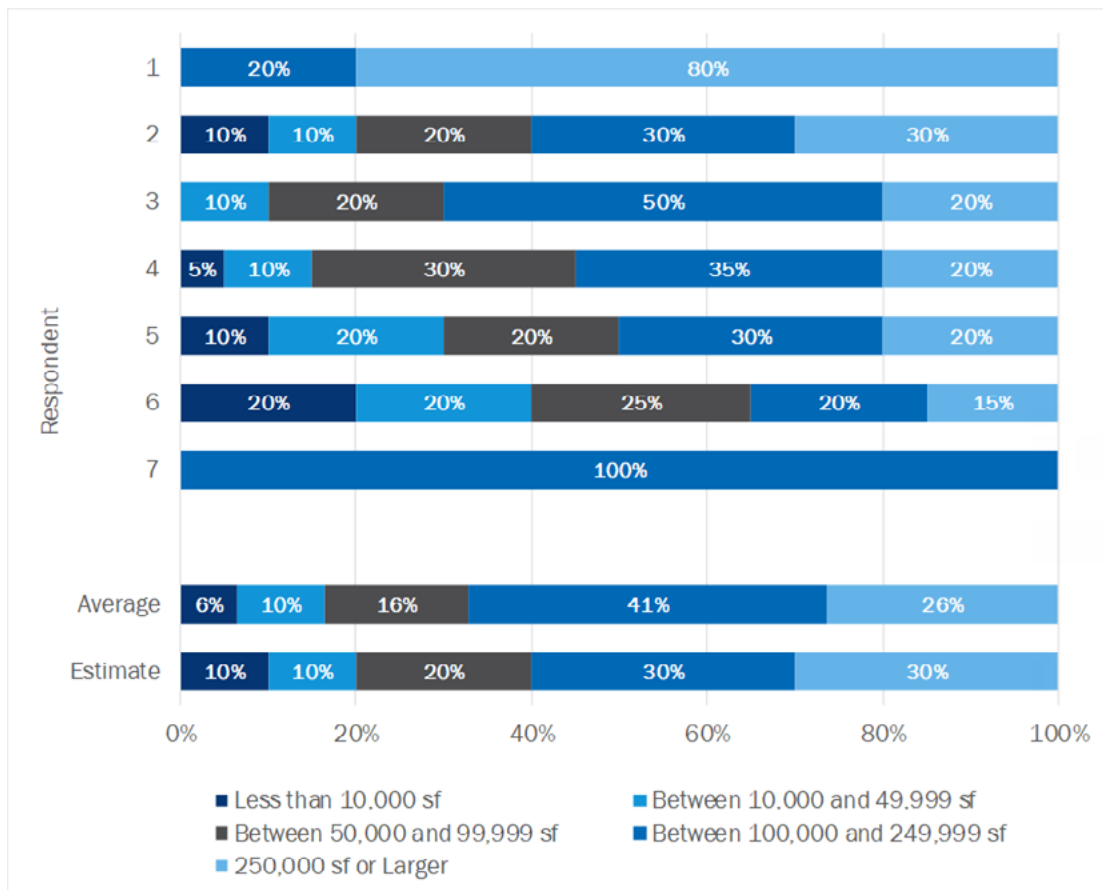


Figure 16 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in private sector buildings annually by Engineering/ Design-build Firms. Size categories are presented as square footage treated by the project.

Q31) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 10,000 SF	Between 10,000 and 49,999 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	250,000 SF or Larger

Q32) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## PRIVATE SECTOR PROJECT SAVINGS

Now I would like to ask you to review responses, mean values, and preliminary estimates on private sector project savings.

**FIGURE 17.** | Share of Private Sector Projects by Annual kWh Usage Savings Category, ESCOs

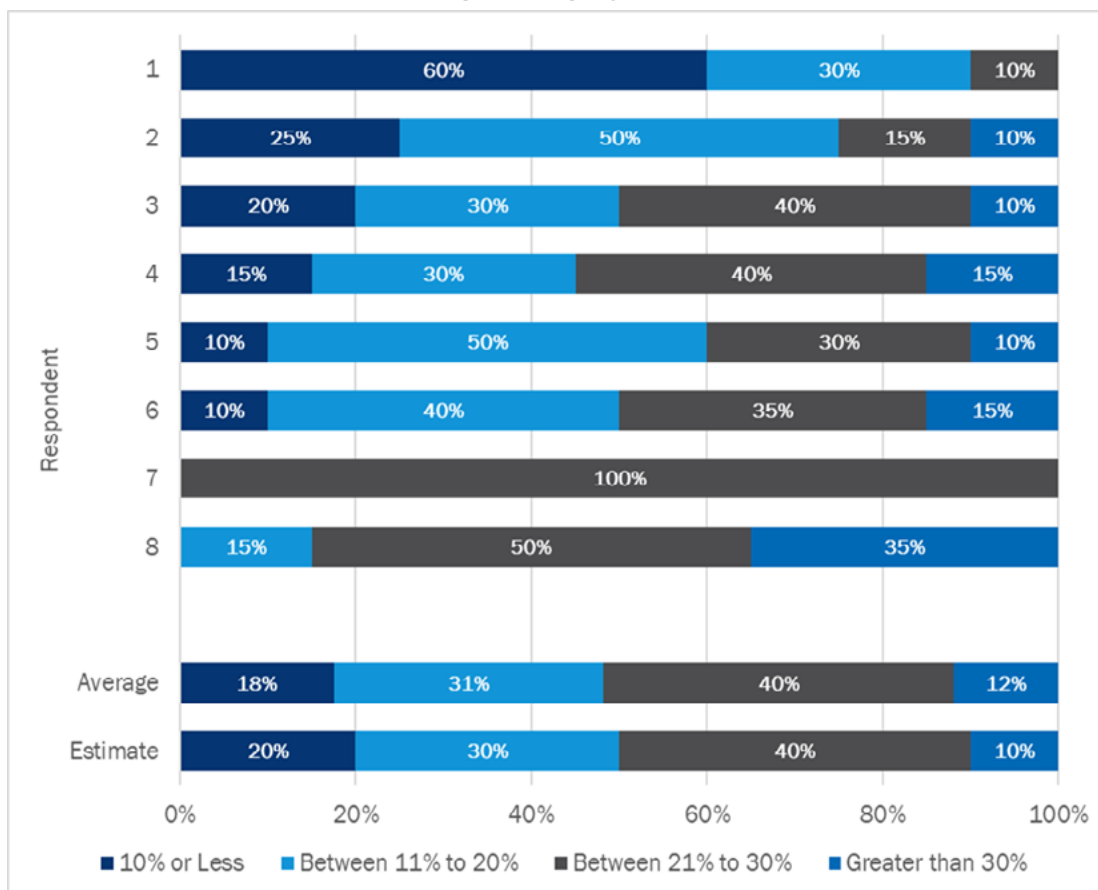


Figure 17 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of private sector ESCO projects that fall within different savings ranges. The ranges presented represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q33) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%

Q34) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 18.** | Share of Private Sector Projects by Annual kWh Usage Savings Category, Engineering/Design-build Firms

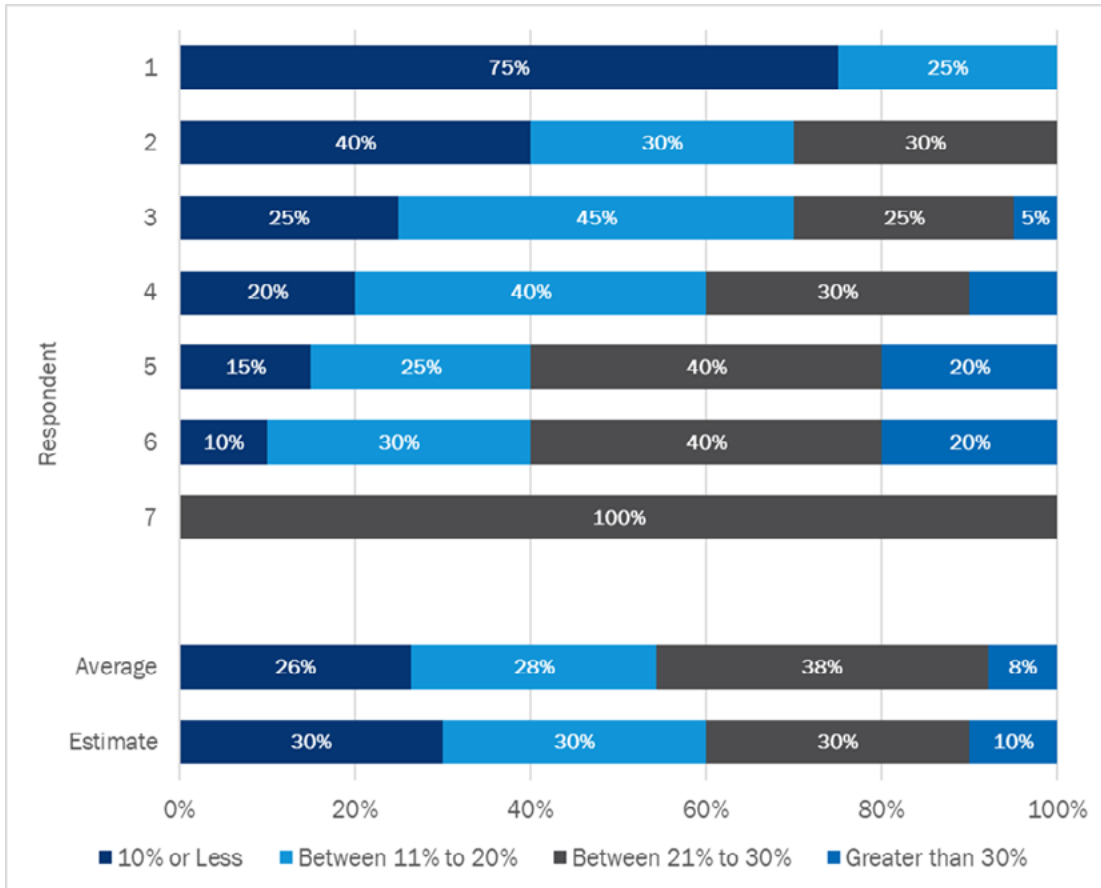


Figure 18 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of private sector Engineering/Design-build projects that fall within different savings ranges. The ranges presented represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q35) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%

Q36) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## **CLOSING SCREEN**

Those are all the questions that I have for you today. Thank you for providing your input through these surveys and interviews!

Lastly, please provide us with the name and address information that should be used to send you your check for \$150 as a “thank you” for participating in this panel.

Q37) Name to be printed on Check:

Q38) Mailing Address:



# **SECTION 6D**

Delphi Panel Online  
Questionnaire  
2nd Round

# Delphi Panel Online Questionnaire

## 2nd Round

### Introduction

Welcome to Round 2 of the NYSERDA expert panel on comprehensive energy efficiency services for non-residential buildings in New York State! In this second and final round, we will conduct a short interview with each panel member. The interview will build on the information the panel had provided in the Round 1 survey. (Thank you again for completing that survey!)

As with the survey, the first part of this interview addresses energy efficiency projects completed in public sector buildings, while the second part addresses energy efficiency projects completed in private sector buildings. As a reminder, we define these as follows:

**PUBLIC SECTOR:** Non-residential buildings owned or operated by government entities in segments including (but not limited to) public schools, public universities/colleges, public multifamily housing, or municipal buildings.

**PRIVATE SECTOR:** Includes non-residential buildings owned or operated by private entities in segments including (but not limited to) private universities/colleges, private medical campuses/hospitals, commercial office space, hospitality, and private multifamily housing.

Similar to Round 1, throughout this interview, we will refer to two different types of firms that operate in the non-residential energy efficiency market:

- a. Traditional ESCOs. Firms that provide a comprehensive set of turnkey services, including energy efficiency-related and other value-added services and for which performance contracting makes up a core part of its energy-efficiency services business.
- b. Engineering/Design-build Firms. Firms that may act as general contractors or consultants. They provide recommendations to the building ownership and play a role as project manager subcontracting the implementation to end-use specific contractors. They can design turnkey projects for a variety of end-uses (e.g., lighting, HVAC, envelope, or controls).

In this interview we will review the preliminary results we have developed for various market characteristics and will ask you to comment on them. These results were developed from the responses to the Round 1 survey completed by this panel. We have developed figures showing the responses from the Round 1 survey, and I had emailed you this information prior to this interview. For each of the characteristics that we will discuss in this interview, we show the actual responses, the mean, and our “preliminary estimate.” Our “preliminary estimate” is generally a rounded mean with outliers removed. For each of the figures below, we will ask you to consider (1) if the preliminary estimates are reasonable; (2) if not, what would be a better estimate; and (3) your thinking as to why the preliminary estimate is or is not reasonable.



Please note that all answers you provide in this interview will be kept confidential to the extent allowable by law and will only be reported in aggregate or anonymized fashion. With your permission I will record and transcribe this interview for notetaking purposes.

NOTE TO REVIEWERS: The questions below are not designed to be read verbatim. Instead, the interviewer will follow the conversational flow and ensure that all quantitative estimates and qualitative feedback are captured for each module.

## Public Sector

### PUBLIC SECTOR FIRM AND PROJECT COUNTS

To start I would like to ask you about the count of firms and the number of projects they complete in public sector buildings.

**FIGURE 1.** | Number of Firms Completing Projects in Public Sector Buildings

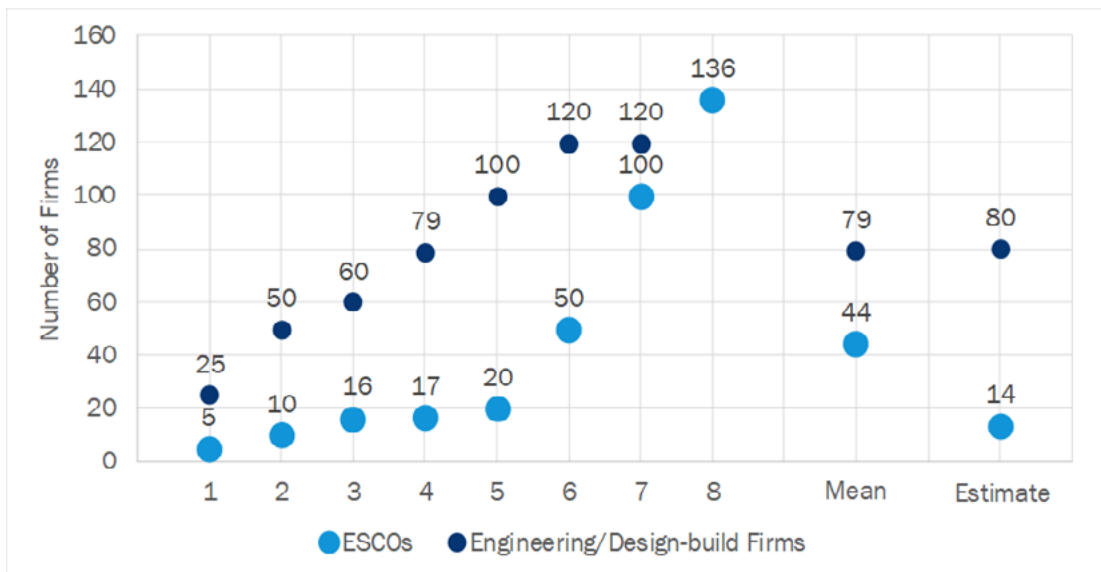


Figure 1 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of ESCOs and Engineering/Design-build Firms that complete projects in public sector buildings.

- Q1) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q1a) Number of ESCO Firms:
- Q1b) Number of Engineering Design-build Firms:
- Q2) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 2. |** Number of Projects Completed in Public Sector Buildings Annually

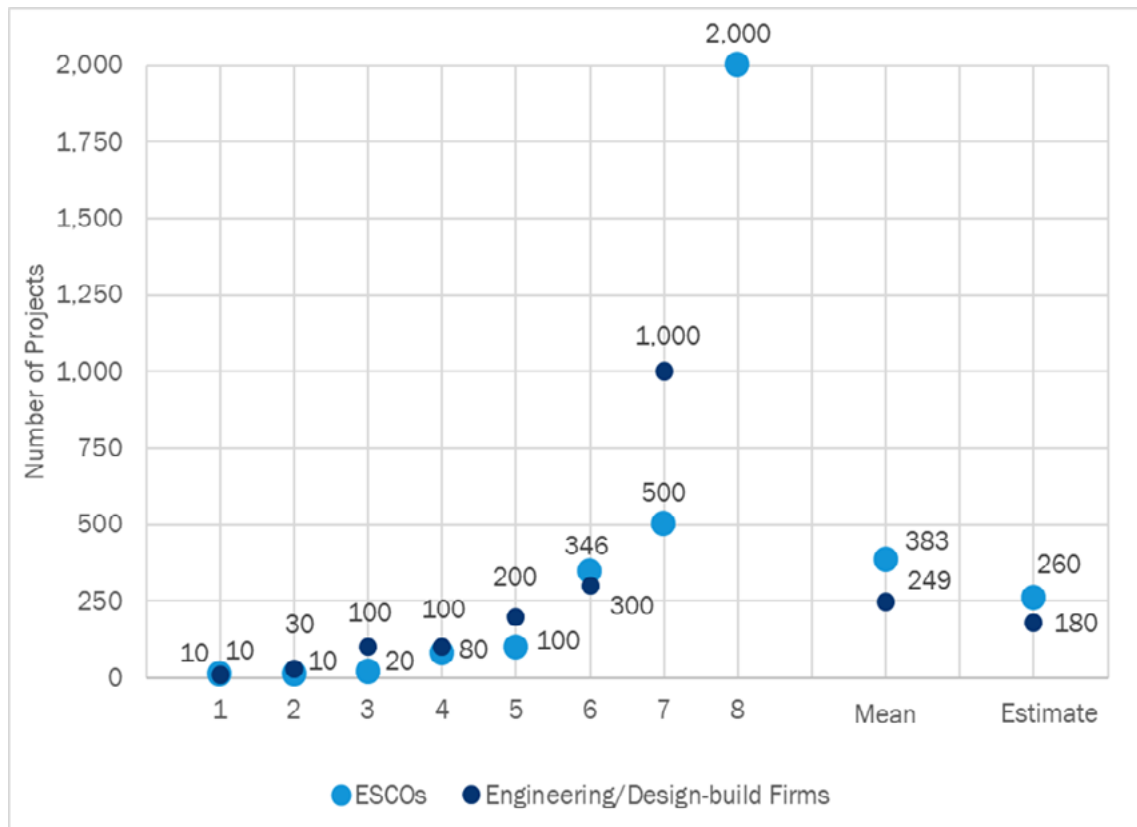


Figure 2 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of projects completed annually by ESCOs and Engineering/Design-build Firms in public sector buildings.

- Q3) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q3a) Number of projects completed by ESCOs:
- Q3b) Number of projects completed by Engineering/Design-build Firms:
- Q4) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

### **PUBLIC SECTOR REVENUES**

Now I would like to ask you to review estimates on the annual revenues for projects completed in public sector buildings, and the types of market segments that account for different shares of those revenues.

**FIGURE 3.** | Total Annual Revenues from Projects Completed in Public Sector Buildings

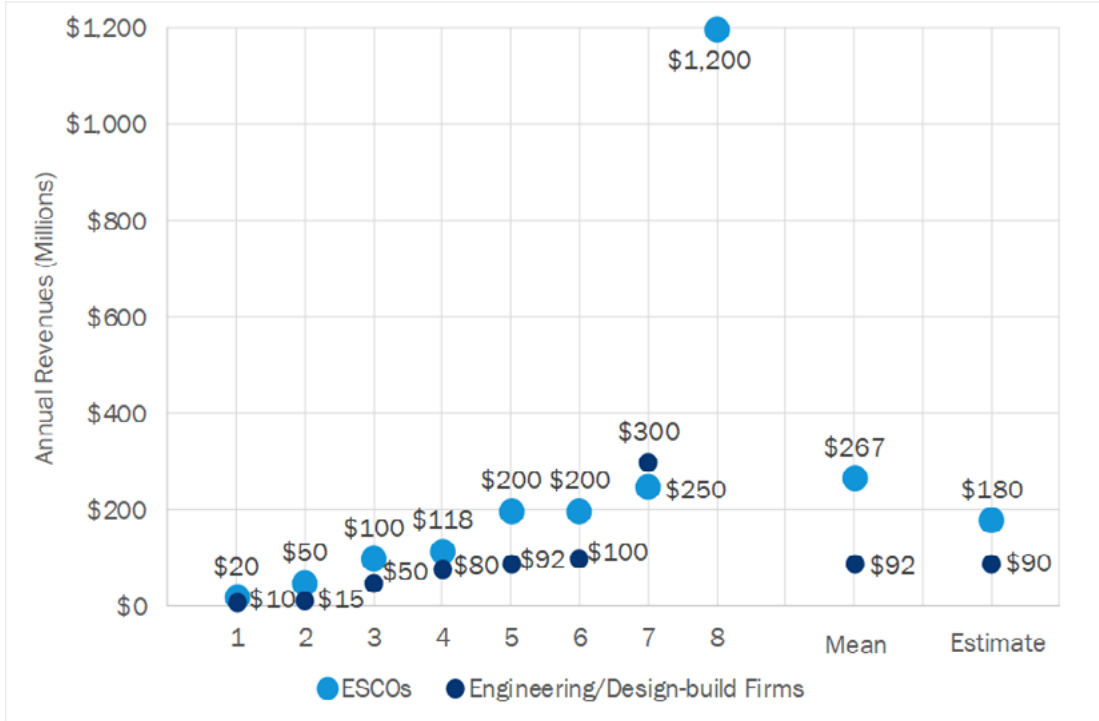


Figure 3 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the total annual revenues from public sector projects for both ESCOs and Engineering/Design-build Firms.

- Q5) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q5a) Public sector revenues for ESCOs:
- Q5b) Public sector revenues for Engineering/Design-build Firms:
- Q6) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 4.** | Share of Annual Revenues by Public Sector Market Segment, ESCOs

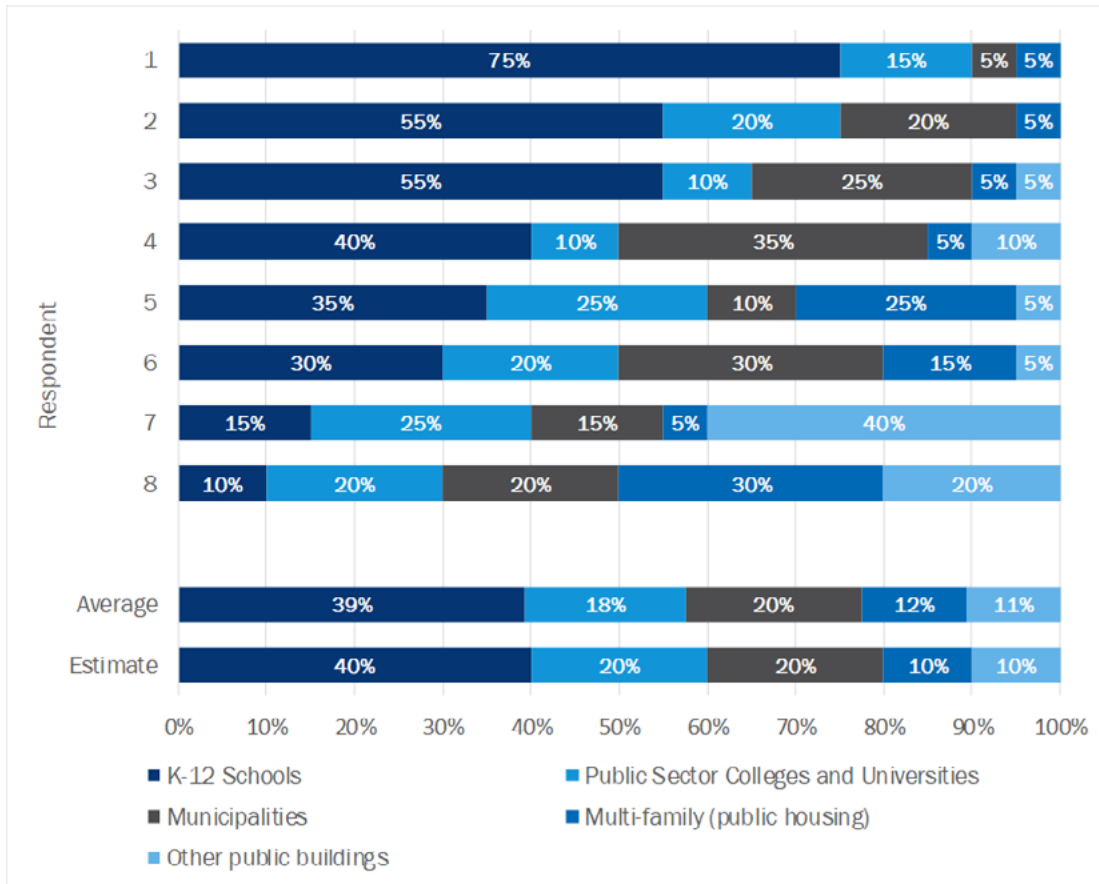


Figure 4 above shows the responses from the Round 1 survey on the share of revenues for ESCOs that come from different public sector market segments (K-12 schools, public sector colleges and universities, municipalities, multi-family or public housing, and other public buildings).

Q7) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

K-12 Schools	Public Sector Colleges and Universities	Municipalities	Multi-family (public housing)	Other public buildings

Q8) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 5.** | Share of Annual Revenues by Public Sector Market Segment, Engineering/Design-build Firms

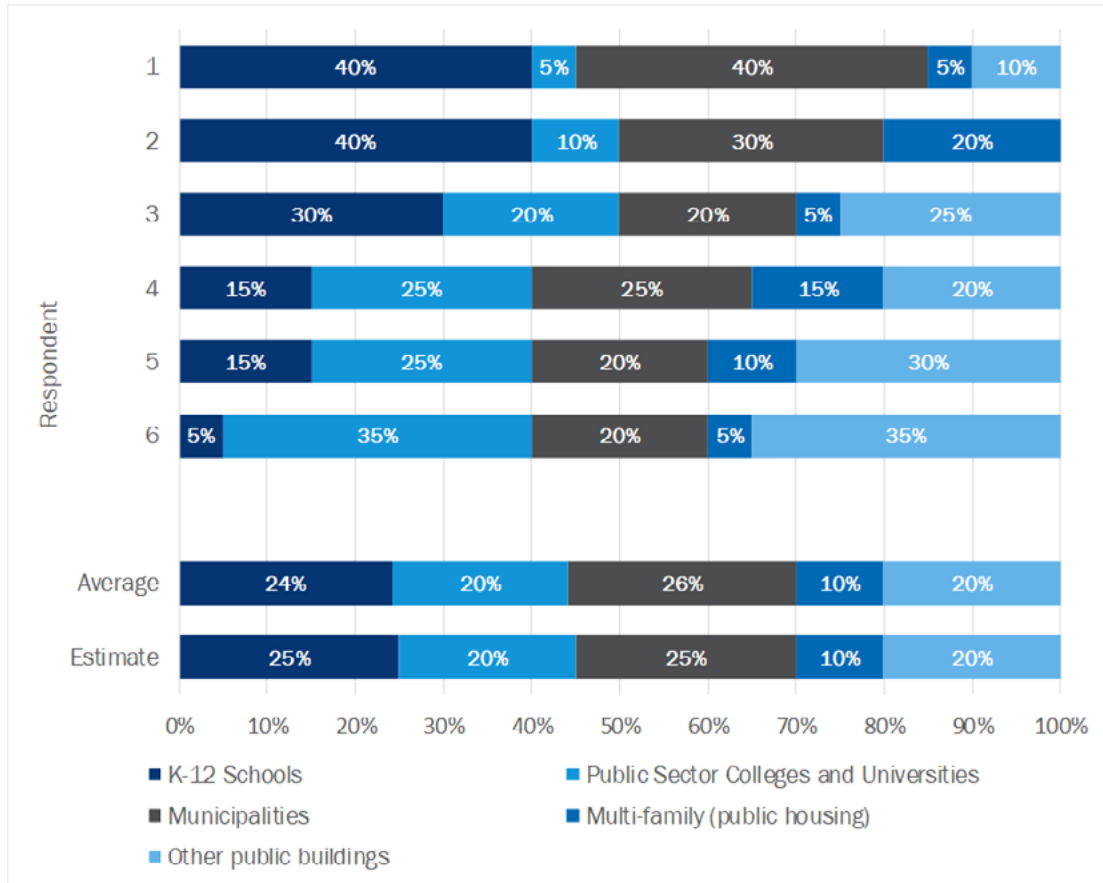


Figure 5 above shows estimates from the Round 1 survey on the share of revenues for Engineering/Design-build Firms that come from different public sector market segments (K-12 schools, public sector colleges and universities, municipalities, multi-family or public housing, and other public buildings).

Q9) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

K-12 Schools	Public Sector Colleges and Universities	Municipalities	Multi-family (public housing)	Other public buildings

Q10) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## PUBLIC SECTOR BUILDING SIZES

Now I would like to ask you to review responses, mean values, and preliminary estimates on the share of projects that are within the square footage ranges presented the chart below.

**FIGURE 6.** I Share of Public Sector Projects by Size Category, ESCOs

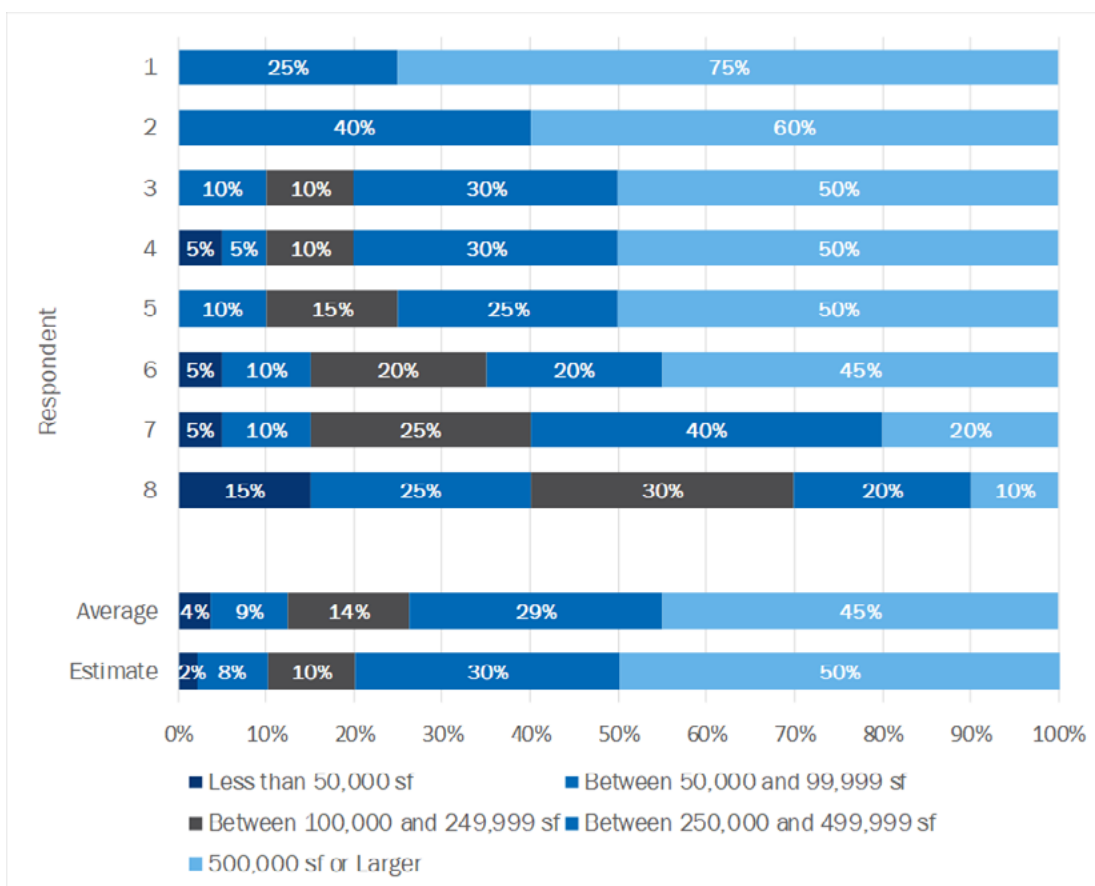


Figure 6 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in public sector buildings annually by ESCOs. Size categories are presented as square footage treated by the project.

Q11) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 50,000 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	Between 250,000 and 499,999 SF	500,000 SF or Larger

Q12) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 7.** | Share of Public Sector Projects by Size Category, Engineering/Design-build Firms

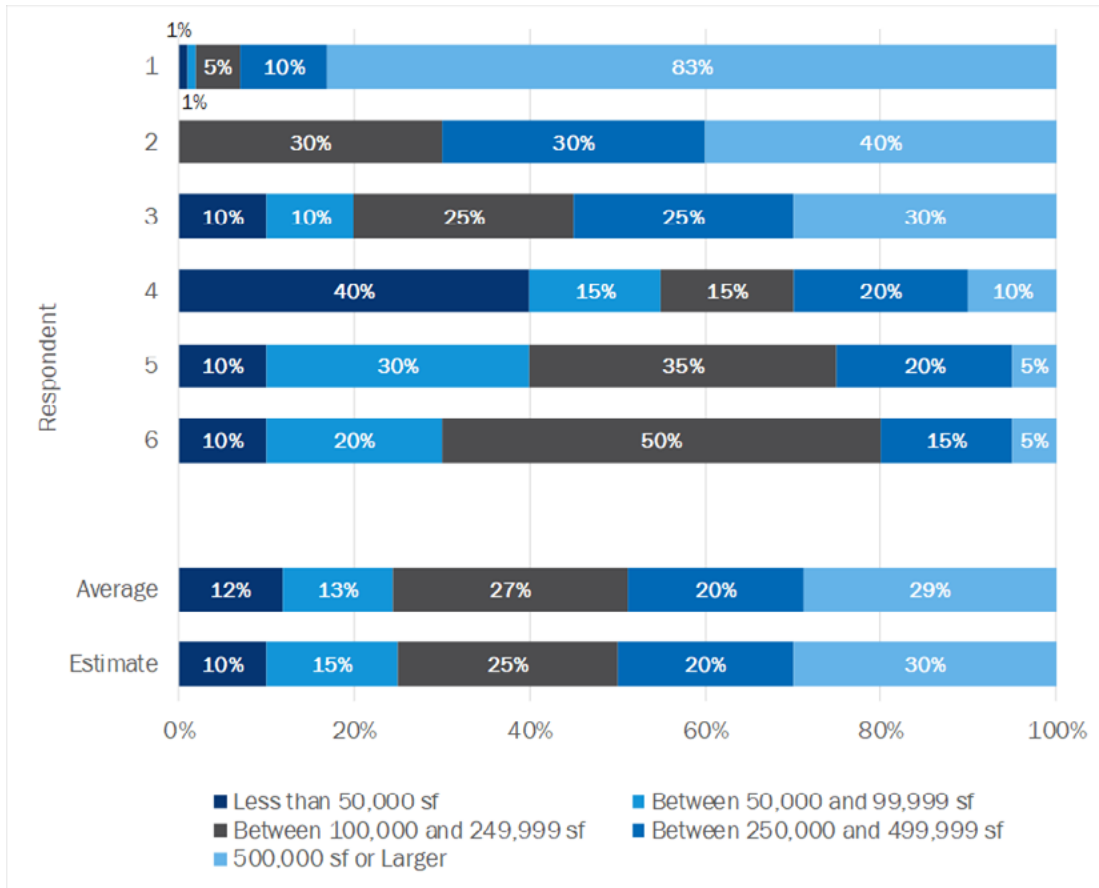


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Q13) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

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**PUBLIC SECTOR PROJECT SAVINGS**

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**FIGURE 8.** | Share of Public Sector Projects by Annual kWh Usage Savings Category, ESCOs

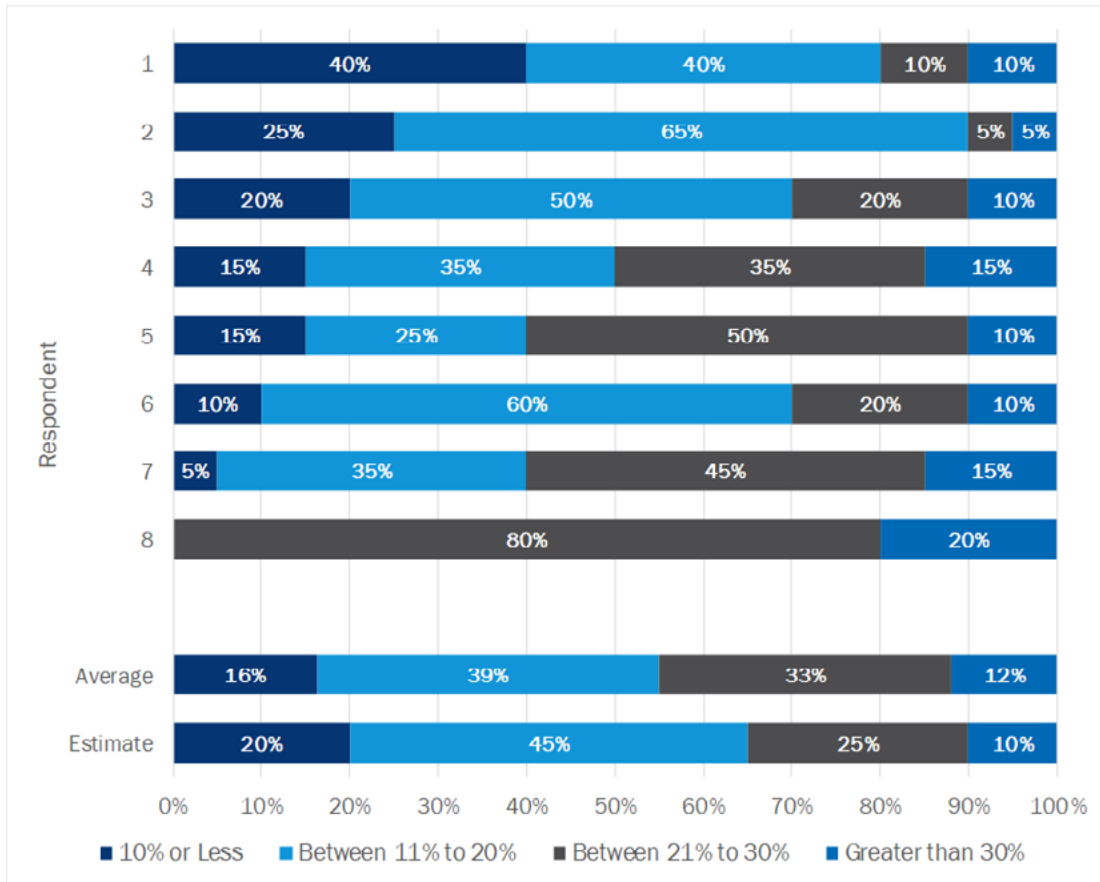


Figure 8 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector ESCO projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q15) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 50,000 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	Between 250,000 and 499,999 SF	500,000 SF or Larger

Figure 8 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector ESCO projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q16) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]



**FIGURE 9.** | Share of Public Sector Projects by Annual kWh Usage Savings Category, Engineering/Design-build Firms

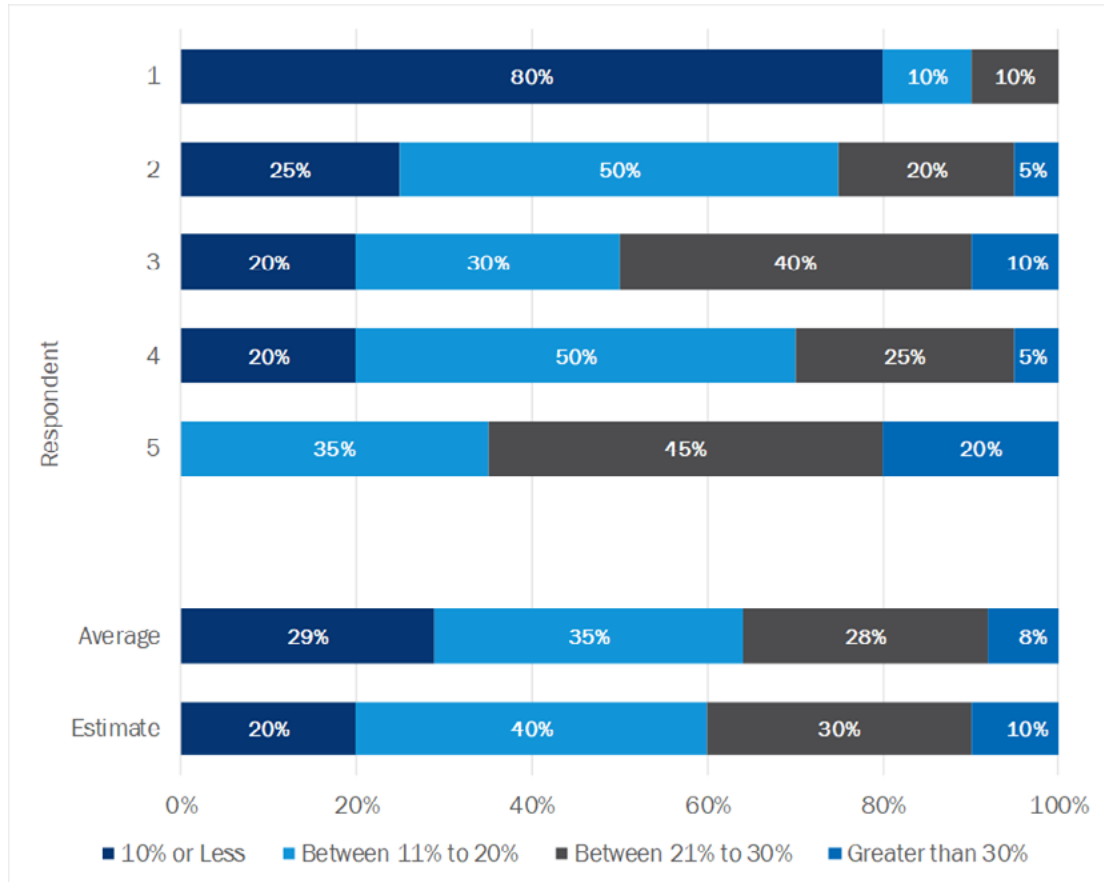


Figure 9 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of public sector Engineering/Design-build projects that fall within different savings ranges. The ranges presented above represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q17) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%	500,000 SF or Larger

Q18) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## Private Sector

The next part of this interview is about comprehensive energy efficiency projects completed in the private sector.

### PRIVATE SECTOR FIRM AND PROJECT COUNTS

To start, I would like to ask you about the count of firms and the number of projects they complete in private sector buildings.

**FIGURE 10.** | Number of Firms Completing Projects in Private Sector Buildings

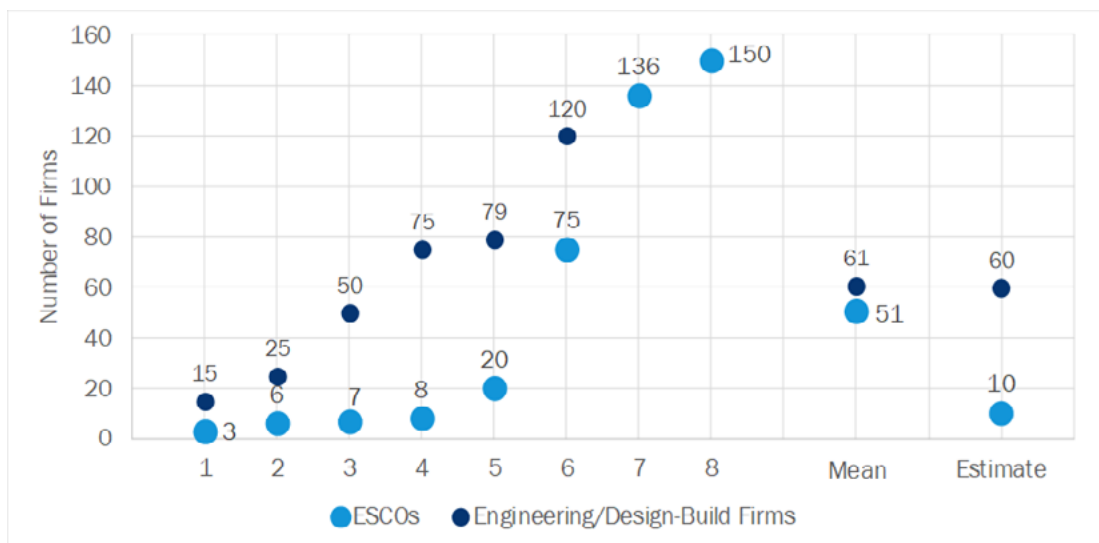


Figure 10 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of ESCOs and Engineering/Design-build Firms that complete projects in private sector buildings

Q19) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Q19a) Number of ESCO Firms:

Q19b) Number of Engineering Design-build Firms:

Q20) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 11.** I Number of Projects Completed in Private Sector Buildings Annually

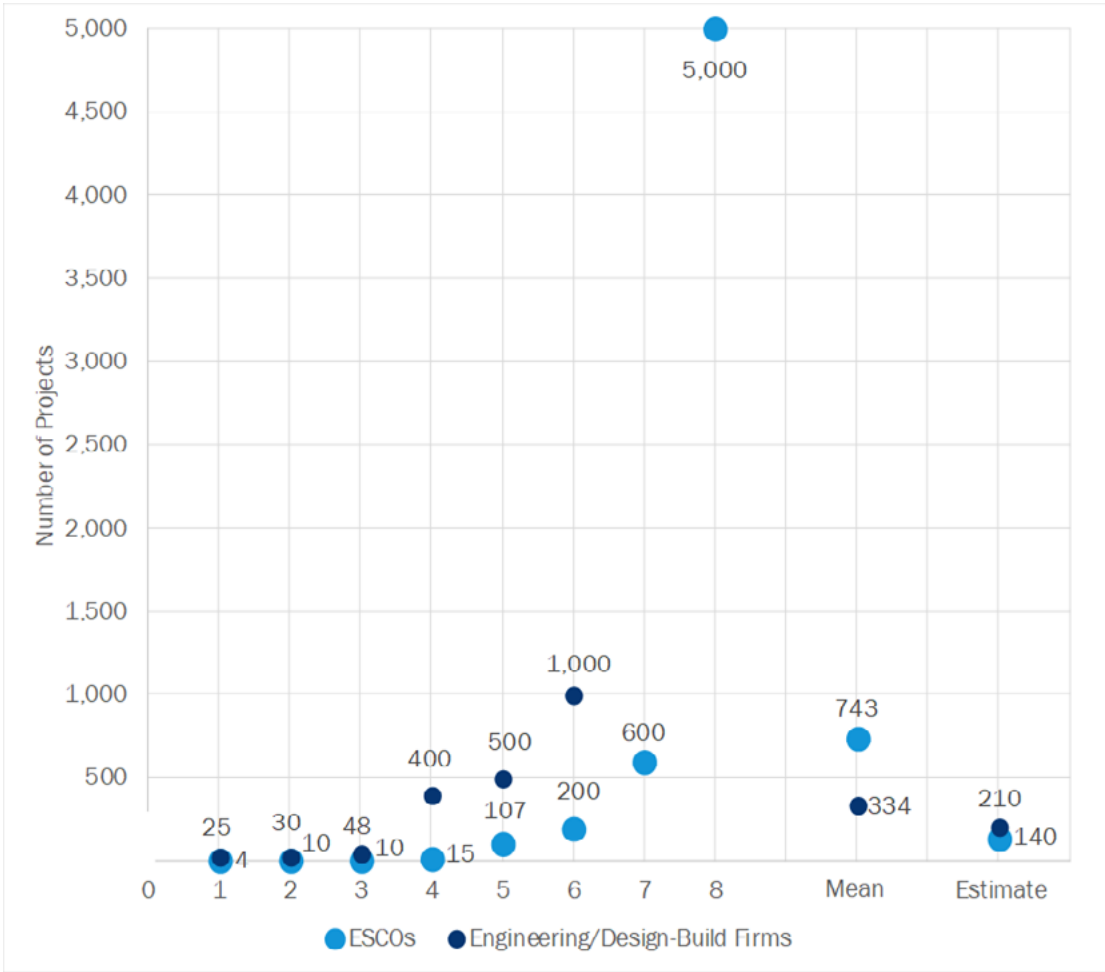


Figure 11 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the number of projects completed annually by ESCOs and Engineering/Design-build Firms in private sector buildings.

- Q21) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q21a) Number of projects completed by ESCOs:
- Q21b) Number of projects completed by Engineering/Design-build Firms:
- Q22) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**PRIVATE SECTOR REVENUES**

Now I would like to ask you to review estimates on the annual revenues for projects completed in private sector buildings, and the types of market segments that account for different shares of those revenues.

## PRIVATE SECTOR REVENUES

Now I would like to ask you to review estimates on the annual revenues for projects completed in private sector buildings, and the types of market segments that account for different shares of those revenues.

**FIGURE 12.** I Total Annual Revenues from Projects Completed in Private Sector Buildings

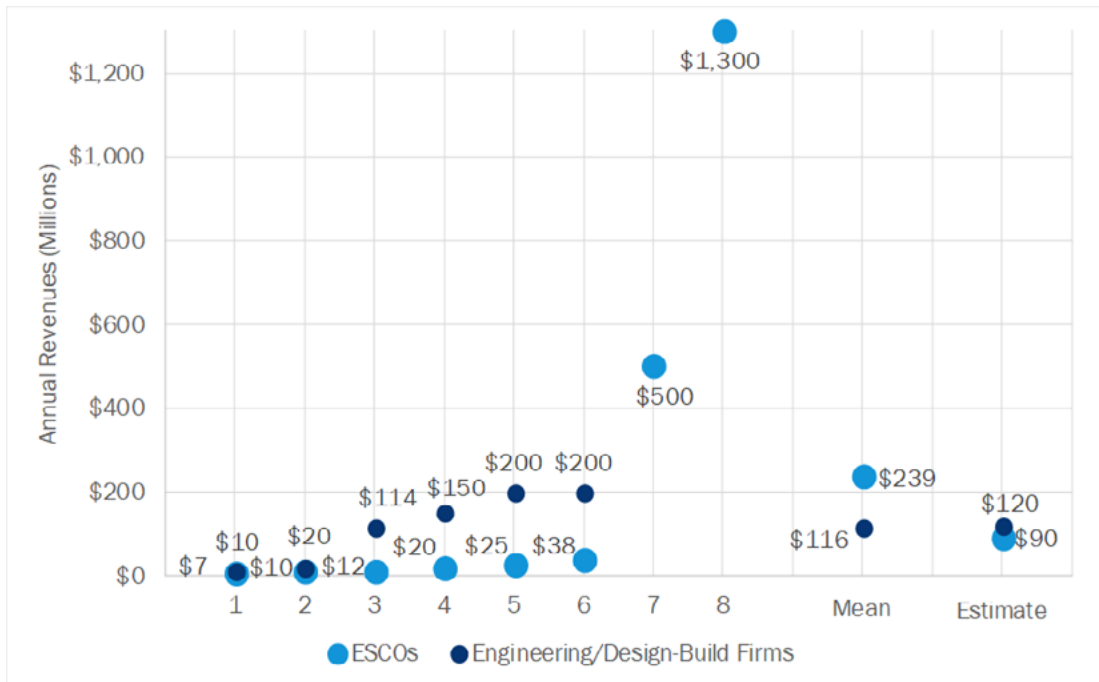


Figure 12 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the total annual revenues from private sector projects for both ESCOs and Engineering/Design-build Firms.

- Q23) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]
- Q23a) Private sector revenues for ESCOs:
- Q23b) Private sector revenues for Engineering/Design-build Firms:
- Q24) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 13.** | Share of Annual Revenues by Private Sector Market Segment, ESCOs

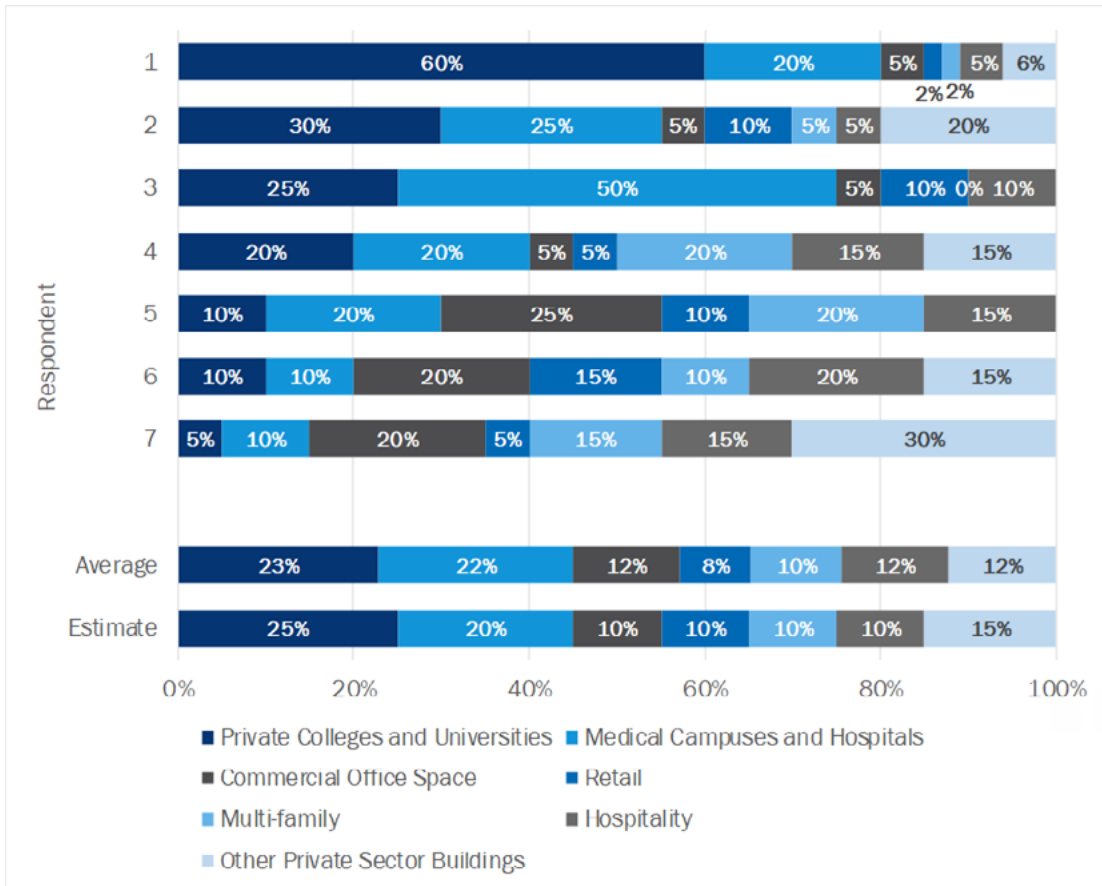


Figure 13 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the share of revenues for ESCOs that come from different private sector market segments (private colleges and universities, medical campuses and hospitals, commercial office space, retail, multi-family, hospitality, and other private sector buildings).

Q25) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Private Colleges & Universities	Medical Campuses & Hospitals	Commercial Office Space	Retail	Multi-family	Hospitality	Other Private Sector Buildings

Q26) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 14.** | Share of Annual Revenues by Private Sector Market Segment, Engineering/Design-build Firms

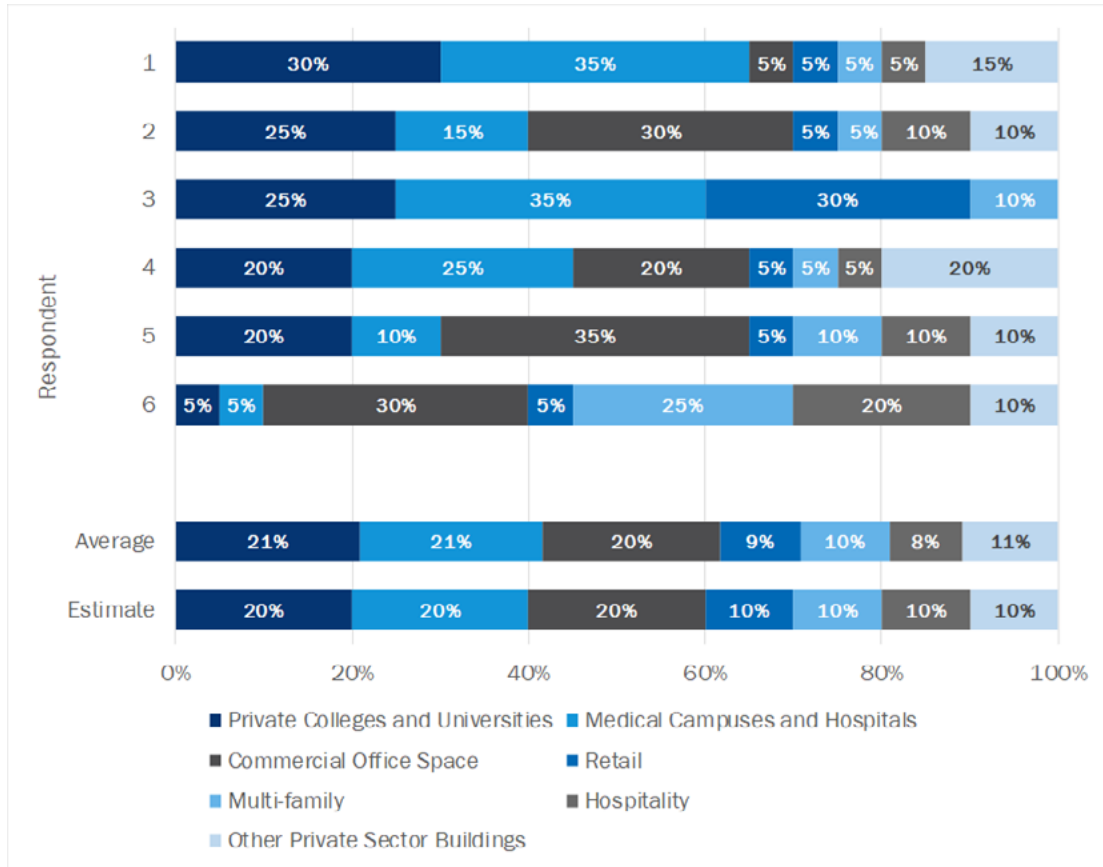


Figure 14 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on the share of revenues for Engineering/Design-Build Firms that come from different private sector market segments (private colleges and universities, medical campuses and hospitals, commercial office space, retail, multi-family, hospitality, and other private sector buildings).

Q27) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Private Colleges & Universities	Medical Campuses & Hospitals	Commercial Office Space	Retail	Multi-family	Hospitality	Other Private Sector Buildings

Q28) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## PRIVATE SECTOR BUILDING SIZES

Now I would like to ask you to review responses on the share of projects that are within the square footage ranges presented in the chart below.

**FIGURE 15.** | Share of Private Sector Projects by Size Category, ESCOs

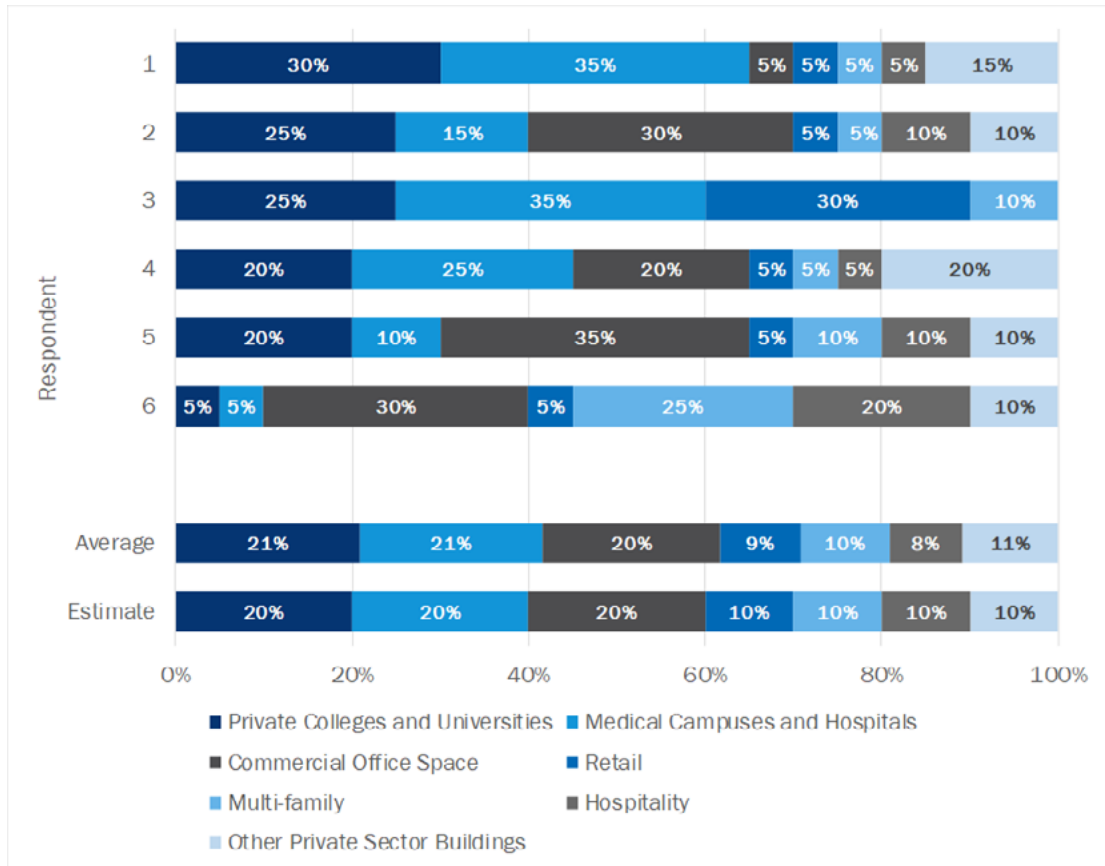


Figure 15 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in private sector buildings annually by ESCOs. Size categories are presented as square footage treated by the project.

Q29) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 10,000 SF	Between 10,000 and 49,999 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	250,000 SF or Larger

Q28) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 16.** | Share of Private Sector Projects by Size Category, Engineering/Design-build Firms

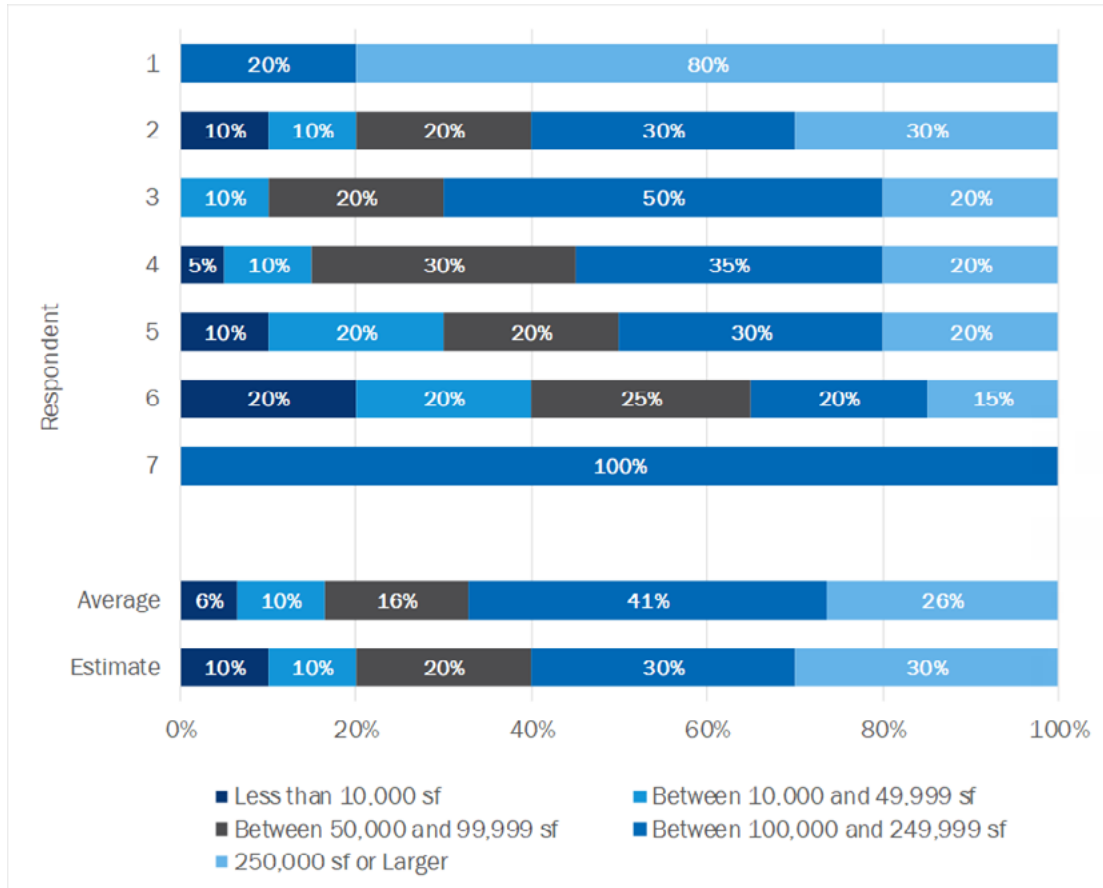


Figure 16 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on size of projects completed in private sector buildings annually by Engineering/ Design-build Firms. Size categories are presented as square footage treated by the project.

Q31) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

Less than 10,000 SF	Between 10,000 and 49,999 SF	Between 50,000 and 99,999 SF	Between 100,000 and 249,999 SF	250,000 SF or Larger

Q32) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]



## PRIVATE SECTOR PROJECT SAVINGS

Now I would like to ask you to review responses, mean values, and preliminary estimates on private sector project savings.

**FIGURE 17.** | Share of Private Sector Projects by Annual kWh Usage Savings Category, ESCOs

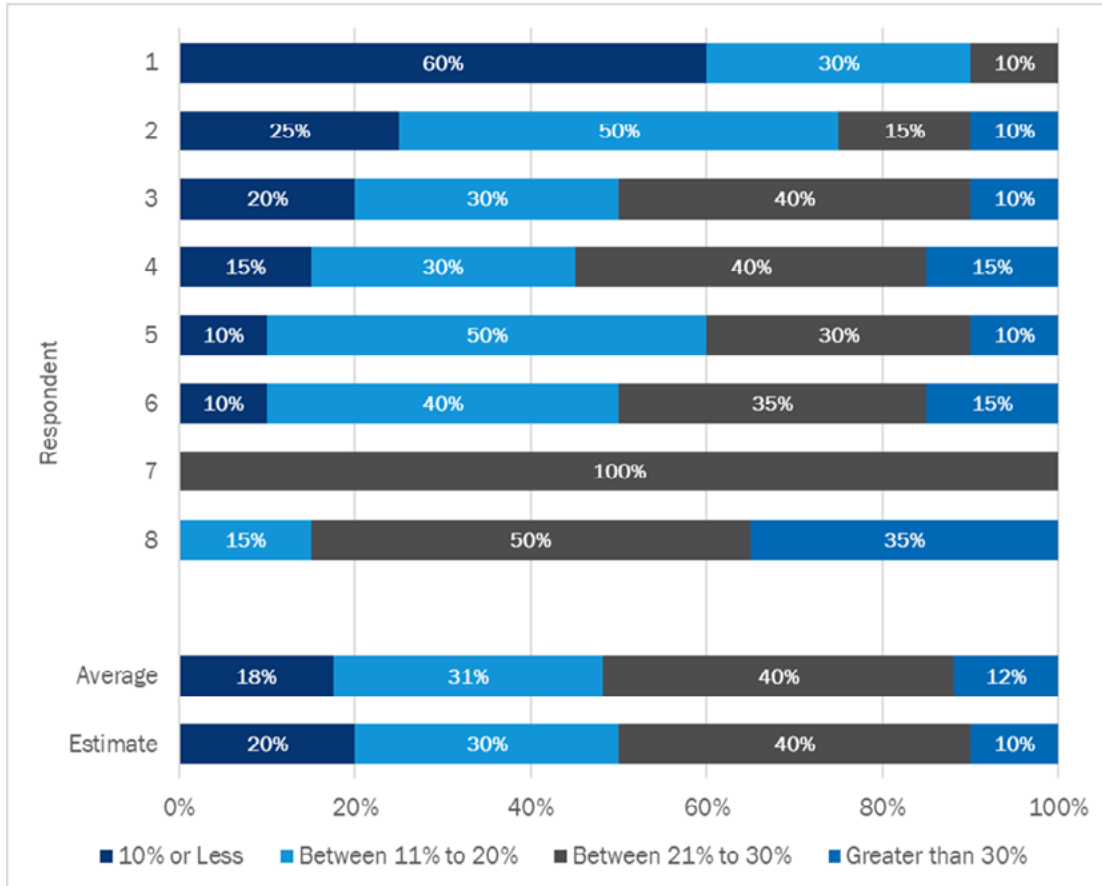


Figure 17 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of private sector ESCO projects that fall within different savings ranges. The ranges presented represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q33) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%

Q34) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

**FIGURE 18.** | Share of Private Sector Projects by Annual kWh Usage Savings Category, Engineering/Design-build Firms

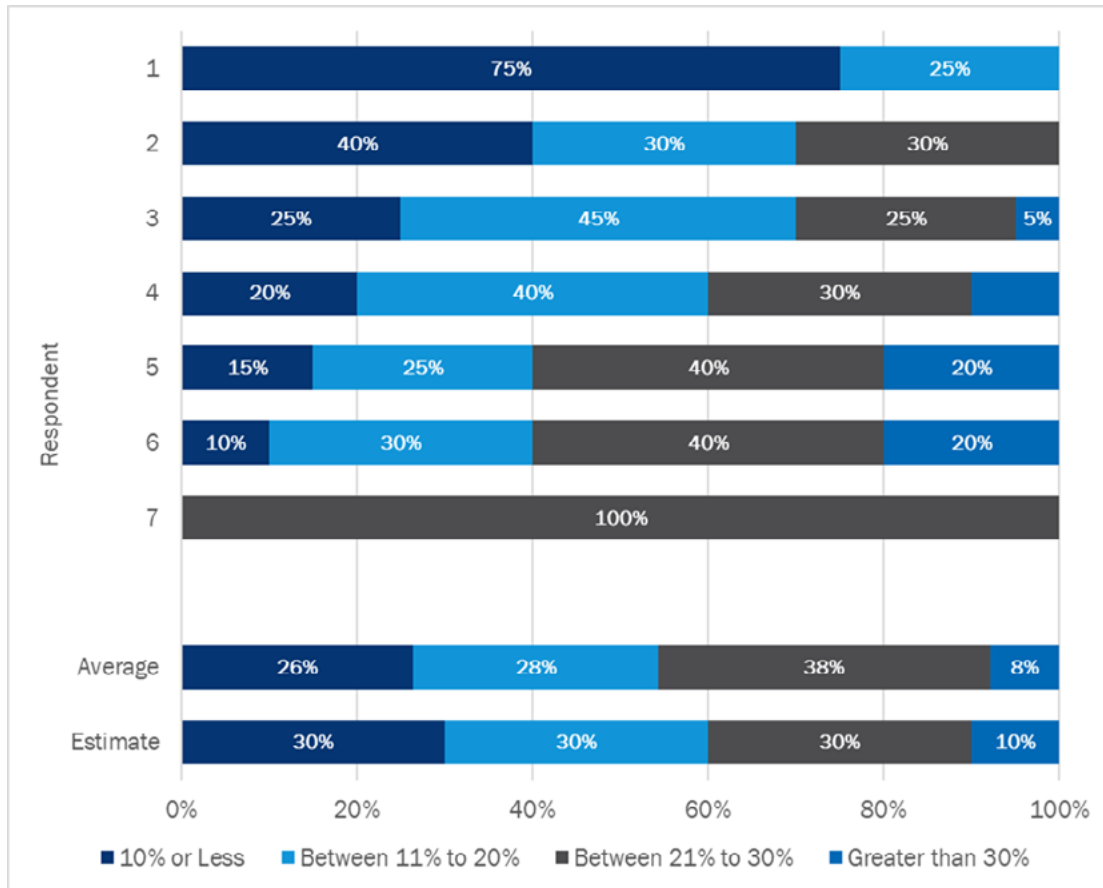


Figure 18 above shows the responses, mean values, and preliminary estimates from the Round 1 survey on share of private sector Engineering/Design-build projects that fall within different savings ranges. The ranges presented represent the total project kWh savings as a percent of the pre-treatment annual usage.

Q35) Do you think these estimates are reasonable? [IF NOT: Which estimates should be revised? What alternate values would you suggest?]

10% or Less	Between 11% to 20%	Between 21% to 30%	Greater than 30%

Q36) Please explain your thinking in providing your answer. [IF changed estimate from that given: On what do you base your revised estimate?]

## **CLOSING SCREEN**

Those are all the questions that I have for you today. Thank you for providing your input through these surveys and interviews!

Lastly, please provide us with the name and address information that should be used to send you your check for \$150 as a “thank you” for participating in this panel.

Q37) Name to be printed on Check:

Q38) Mailing Address: